RESEARCH STUDY

"To what degree does the organization of time (e.g. length of day, days in week, length of breaks) in School District No. 64 affect educational outcomes?"

Study conducted by:

Martin Blakesley, Independent Researcher

mblakesley@sd64.bc.ca

Undertaken for:

The Board of Education

School District No. 64 (Gulf Islands)

Respectfully Submitted: May 21, 2013

"If experience, research, and common sense teach nothing else, they confirm the truism that people learn at different rates, and in different ways with different subjects. But we have put the cart before the horse: our schools and the people involved with them—students, parents, teachers, administrators, and staff—are captives of clock and calendar. The boundaries of student growth are defined by schedules for bells, buses, and vacations instead of standards for students and learning."

~ **Prisoners of Time 2005**

"The formulation of the problem is often more important than the solution."

~ Albert Einstein

"If not you, then, who? If not now, then when?"

~ Rabbi Hillel

RESEARCH STUDY

"To what degree does the organization of time (e.g. length of day, days in week, length of breaks) in School District No. 64 affect educational outcomes?"

Parts of This Study

Part One: The Research Project

"To what degree does the organization of time (e.g. length of day, days in week, length of breaks) in School District No. 64 affect educational outcomes?"

TABLE OF CONTENTS

Introduction

The SD64 (Gulf Islands) Board of Education, mindful of its obligation under Policy 100, wishes to be more fully apprised of the impacts that the ways operational and instructional time are organized have had, and can be expected to have, on educational outcomes in the various school communities under its jurisdiction.

With a view to recent provincial legislation changes governing school calendars, the Board has commissioned this study, the purpose of which is to answer the following Board -posed research question:

"To what degree does the organization of time (e.g. length of day, days in week, length of breaks) in School District No. 64 affect educational outcomes?"

The district has, for eight years, engaged in an annual process of local calendar modification, resulting in district-wide implementation of a locally modified school calendar based upon a four-day instructional week. This study was undertaken to help the Gulf Islands educational community develop a deeper, shared understanding of the complex relationships between and amongst the way school time is organized, educational outcomes, and the variables seen to affect these outcomes. It continues and extends the public consultation process mandated by the Minister of Education and engaged in by the district, annually, since the adoption of the locally modified four-day school calendar in 2004-2005.

The district's adoption the four-day school calendar eight years ago was controversial at the onset and it continues to be so though, on the face of it, to a much lesser extent. While constituents have apparently adjusted to, and become more accepting of, this approach to organization and management of school time, they continue to question its effects upon educational outcomes, particularly where student achievement is concerned.

Wagner (2010) asks, " In light of the fundamental changes that have taken place in our society in the last twenty-five years, what does it mean to be an educated citizen in the twenty-first century?" The researcher notes that the ultimate goal, or educational outcome, of the BC education system is development of The Educated Citizen, whose definition or description has existed in BC's Statement of Education Policy Order since 1989. Educated Citizens are those who are:

- thoughtful, able to learn and to think critically, and who can communicate information from a broad knowledge base;
- creative, flexible, self-motivated and who have a positive self-image;
- capable of making independent decisions;
- skilled and who can contribute to society generally, including the world of work;
- productive, who gain satisfaction through achievement and who strive for physical well-being;

- cooperative, principled and respectful of others regardless of differences;
- aware of the rights and prepared to exercise the responsibilities of an individual within the family, the community, Canada, and the world."

The research question posed, when it asks about the relationship between the way time is school organized and educational outcomes, reflects the Board's concern for the well-being and efficacy of all students, as represented in this ideal.

Other, lesser outcomes are subservient to, and work together towards the development of students who approach this ideal.

The fact that an outcome can be as simple as 'the student can perform 25 push ups in one minute' or as complex as the set demonstrated by BC's Educated Citizen upon graduation introduces a challenge where this study is concerned. Because the research question speaks of educational outcomes in the broadest sense, without specifying any, the researcher was thus faced with a decision. Should he try and speak to the effects that the way time is organized has upon all of them, or upon some of them? Or, should he pre-select educational outcomes to be considered, or let the research literature identify those that have been found to be in some sort of relationship with time?

The researcher approached the question mindful of what the Singapore Department of Education (http://www.moe.gov.sg/education/desired-outcomes/)says about educational outcomes: "[They] make explicit what we aspire to develop in our young so as to lay the strong foundations for them to thrive and achieve success in life as contributing members of society" and that "these outcomes establish a common purpose for educators, drive our policies and programmes, and allow us to determine how well our education system is doing." It is with this perspective on educational outcomes in mind that the researcher has approached and conducted this study.

In Canada, as in the United States, school districts are faced with constant pressure to improve as they work towards the ideal embodied in The Educated Citizen, and this pressure comes at a time when the financial resources needed to do so are widely seen to be shrinking. A major challenge, dilemma even, faced by school boards today involves not simply the inevitable conflict of values and the tensions that result, within the communities they serve but, moreover, a conflict of duties. On the one hand, there is the duty to provide students with the best educational experience possible and, on the other, the duty to do this in the most fiscally responsible and accountable manner possible.

The struggle to meet this and other such challenges is what noted educational philosopher John Dewey calls 'deliberation'. This study supports the Board's 'deliberate' approach, one that sees it exploring, prior to acting, possible ways of organizing school time, and possible impacts upon educational outcomes.

In attempting to answer this research question, the researcher has been mindful of the Gulf Islands School District's distinct context, its more recent history and the conflict it has carried, and the ways these have shaped the district's past and present and may

influence its future. This study is intended to help the Board set a course of action that realizes value and meaning, and helps to harmonize conflict.

We live in an era marked by incredulity toward meta-narratives – the sets of expectations, rules, guidelines that shape and reinforce our beliefs about the way the world works. This attempt to answer the research question posed requires that we seriously consider the validity and currency of our educational story, and it raises a further question bearing on this study and its findings: What is the meta-narrative that has shaped and reinforced our collective beliefs around public schooling and education, generally, and the way we organize school time, specifically, and does it still adequately tell our story? This thought-provoking question serves well as another lens through which to view and consider the information gathered, particularly as it relates to the widely-held assumption, belief even, that there is a sound educational reason why North American school districts have, for a century, followed standard approaches to the organization of school time.

Copple's (1992) work informed the United States National Education Commission on Time and Learning's 1994 study called *'Prisoners of Time'*. This work provides a review of the research available at the time, and it explores topics directly related to the research question. These topics have provided some guiding research questions. In approaching these, the researcher has been positively mindful of David Berliner's (2002) oft-cited observation that 'educational research is the hardest-to-do science of them all', because of the absolute power of context, the myriad interactions that together shape the educational experience, and the way that 'solid scientific findings in one decade end up of little use in another decade because of changes in the social environment that invalidate the research or render it irrelevant.' With educational research, as with most things, it appears, the ground beneath our feet continues to shift, and what was true yesterday isn't necessarily so today.

While this study is primarily concerned with answering the research question, it recognizes a cluster of greater and more fundamentally important questions (Coulter and Weins, 2002) that, historically, have generated too little discussion and even less agreement: What is the purpose of education? Who should decide? By what means do we work towards achieving our 'prior ends', and how do we know whether we've succeeded, or not? How do we know when 'actual outcomes' square with those intended, and how do we account for the degree to which they are aligned or not? And, as we account for this, can we adjust our sails as necessary, deliberately, and in a way that maximizes value, minimizes conflict, and ensures growth of collective intelligence?

Dewey, Berliner, Copple and others provide lenses through which to consider the question itself, the information generated, and the ways it might be understood, in an effort to answer this question, and others associated with it.

Study Methodology

This research study was conducted during the period September 2012 – March 2013. It includes a review of literature relevant to the research question; some analysis of qualitative data produced at school, district and provincial levels and it draws on the

experiences, thoughts, and questions of district people, as these relate to the question. It includes qualitative findings derived from surveys and interviews involving a variety of stakeholders – teachers, students, former students, parents, school and district administrators, and members of the greater community. In total, at least 672 individuals participated in this research study (the researcher can't be sure because interviewees weren't asked if they submitted surveys, in the interest of anonymity and confidentiality).

Four surveys were developed: one for elementary students (K-5); one for students in Grades 6-12; one for parents and community; and one for district employees. All but the elementary surveys were designed for on-line administration. The elementary survey was administered in paper and pencil fashion, in the students' classrooms. Focus interviews were conducted to help make sense of survey findings.

The general approach has been one of 'funneling.' Fairly broad survey questions, based upon themes identified in the research literature, were asked using four different, but parallel, survey instruments. Responses were analyzed and considered against what the research literature says with respect to key aspects of the research question. More focused, clarifying questions were asked of individuals and groups, as necessary, and results were again considered against the research literature. (Palys, 1997)

Scope and Limitation of this Study

At the onset, it was important to recognize the assumption inherent to the question; that there IS a relationship between the way school time is organized, and educational outcomes, and that the degree to which the former affects the latter can be determined and measured in some sort of definitive way, within the scope of a study of this size.

A review of relevant literature has been conducted, to determined the degree to which this relationship has been found to exist; the degree to which it is thought to be direct or indirect, causal or not; and whether the relationship involves, or is affected by, other variables. This review has informed the researcher's approach to the question in the local context. While the study has looked for, considered and presented evidence suggesting a causal relationship between time and outcomes, the scope and limitations of this study has not allowed for confirmation of one, due to the inability to control for the myriad of variables affecting and affected by the relationship in question.

While disembodied data relative to particular, lesser outcomes often serve as useful indicators of student achievement, it is important to remember that these are, as the saying goes, 'the finger pointing at the moon, rather than the moon itself''. In other words, it is important to keep one's sights on the bigger picture, consistent with Ministry of Education advice in this regard: "…results should be discussed directly with school district and school representatives who can put the results in context."

Due to limitations inherent in the empirical data available, the researcher is more reliably able to comment on the perceived degrees of relationship between time and outcomes, than to quantify them. The evidence gathered is largely descriptive and exploratory in nature, and will serve to further conversation within the district about how

to organize and utilize school time, in a way that can be expected to maximize educational outcomes.

The District Context

The context within which the research study is situated has different interrelated aspects, including the geographic aspect, the human/historical aspect and educational/political aspect.

In geographical terms, the district is a unique community of six Southern Gulf Islands clustered together in the Salish Sea, and it is acknowledged that the district lies in the ancestral homelands of Coast Salish peoples, whose histories, cultures, and traditions figure prominently in the culture of the district and, increasingly, in the educational programs of its students.

The school district's deepest roots lie with Salt Spring Island's first teacher, John Craven Jones, a young, college-educated black man from North Carolina who taught three days a week in the central island, and three in Fernwood – in 1859. Garner (1980) attended the Divide and Cranberry Schools, and offers colorful insights into schooling on Salt Spring Island during the First World War.

The district began to form in 1869, prior to the Vancouver Island Colony joining Confederation, and took its current form following The 1945 Report of the Royal Commission. This report recognized that districts must be both large enough to have their own high school as well as encompass an area that is geographically, economically, or socially comprehensible as a unit. In response to it the provincial government consolidated the province's 649 school districts into 74 larger and distinct school districts. As a result, the three then-existing Salt Spring Island districts and the seven Outer Island School districts became, and are to this day, one entity.

This district is responsible for a K-12 population of approximately 1700 students. It comprises 11 schools, all defined by the communities they serve (whether individual island communities or, as in the case of Salt Spring Island's distinct communities variously located on the island). Ten of these are located on Salt Spring, Galiano, Mayne, Saturna and the Pender Islands, with the most recent addition being located in North Vancouver.

Of the district's schools, six are located on Salt Spring Island; the largest, Gulf Islands Secondary School, offers Grade 9-12 programming to students who have completed elementary and middle school programs in the other schools, both on Salt Spring and on the Outer Gulf Islands. Because the Outer Islands schools offer K-12 programs, high school students can chose to enroll in a secondary program on their home islands, or move between programs at GISS and at their home island schools.

There is no road network connecting the islands with each other, or with either the southern mainland or Vancouver Island. As a consequence, students move to, from and between schools, by way of an intricate network of water taxis, school buses, and ferries.

In the 'District Context' section of the current district achievement contract, we read that "except as an educational organization, there is little sense of connectedness amongst the distinctly unique communities that constitute it." The disconnectedness resulting from the Gulf Islands' geography is referred to elsewhere, for example on the website 'vancouverisland.com', where we read: "Each of the Gulf Islands seems to be a world unto itself." A major challenge faced by the district involves overcoming the isolation that can result from this geographical disconnectedness, in the interest of organizational cohesion.

In the Spring of 2004, the Board of Education found itself faced with a declining enrolment, a budget shortfall, and an inability to carry on as before. In March of that year, the Board initiated a series of consultation meetings in the district's school communities, in an effort to identify the best response possible under difficult circumstances, one that would preserve district programs.

With input from these meetings, and from its Futures 64 Task Force, the Board began to consider a move to a four-day school week, as it's best option. Having had input from a district team sent to Boundary School District No. 51 the Board moved, in May, 2004, to implement a four-day school week. This was done according to provisions in the provincial School Calendar Regulation that allowed for local calendar modification.

The Board's decision was not easily made and, at the time, it was not well supported by the school communities. A May 12, 2004 submission to the Board by the Galiano Island school community, viewed the move as "an educationally [un] sound alternative to a system that has been in place for over a hundred years." The district's employee groups shared this view, and expressed particular concern for students' abilities to cope with compressed school time; for program integrity; and for hourly-paid support workers, who would experience a roughly 20% reduction in hours worked per week, as a consequence of the move.

The four-day week calendar has now been implemented for 8 successive years in SD64 and, while arguments that it doesn't represent educational best practice continue to be made, it appears that this way of organizing school time has received increased acceptance over that time. Nonetheless, school and district-level administrators, teachers, support staff, parents, students and community alike wonder if, and if so, how and to what degree this 'compression' of instructional time impacts educational outcomes, and the Board recognizes and reflects this concern in the research question posed.

While this district has not followed a standard calendar for eight years, its locally modified calendar has utilized a four-day week approach within a calendar that has maintained most of its attributes. With the introduction, in Spring, 2012, of the provincial government's Bill 36, the "School Amendment Act, 2012", this and other school districts find themselves exploring new school calendar possibilities, because the standard school calendar, enshrined for so long in legislation, is no longer mandated.

An SD64 Board member observed, following the April 2012 Board meeting (Driftwood, April 18, 2012): "Quite a lot has changed in the eight years since the four-day week was implemented, including new teaching methods and technologies that could allow

new calendar configurations. And changes to the funding formula have benefited the Gulf Islands district this year, making the financial environment seem a bit more friendly." At that time, a parent observed, "While recent research suggests the four-day week could actually benefit education, to date the district has collected no data on whether the change has had a "deleterious," "neutral" or "preferential" effect on local students." "Eight years in, the Board does not have any robust evidence either way".

District Accountability and Student Achievement

While it is arguably true that "the Board does not have any robust evidence" regarding the effects that implementation of a four-day school week has had over time, this would not be due to a lack of effort, on the part of the Board, to gather student achievement data.

Through the years that the four-day week has been in place the district has, consistent with Ministerial expectation, satisfied BC School Act requirements that "each Board of Education in British Columbia [must] prepare and submit to the Minister of Education an Achievement Contract with respect to standards for student performance and plans for improving achievement in the district".

A number of documents related to the achievement of district students were reviewed, in effort to determine:

- the overall trend in students' achievement during the period 2002-2012,
- whether there is any evidence that the way school time has been organized has had effect upon educational outcomes during that time period; and, more specifically,
- whether there is any evidence that the following of the four-day week calendar for eight school years has had an appreciable effect on student achievement.

The documents reviewed are available on-line (through the district website, the Ministry of Education website, or the Fraser Institute website), for perusal by the general public. They fall into five main categories:

- the Ministry of Education's School District Profile and other documents, which provide information about the school district and the students' academic achievement performance over the period 2001-2013,
- the report of the April 2006 District Review (conducted by an external panel composed of representatives of seven school districts), submitted to the Minister of Education,
- achievement contracts between the school district and the Ministry of Education, for the period 2007-2012, which speak to both student performance on a year-to-year basis, and district plans to improve achievement as and where necessary,
- the Superintendent's mid-year reports on student achievement in the preceding year, for the periods 2008-2012,

- the Fraser Institutes' Report Card on Secondary Schools, which tracks the achievement of Gulf Islands Secondary School students for the period 2007-2012.

Student achievement data gathered by the province and district is limited in its ability to adequately convey how the district is performing as a whole, and how student sub-sets are performing, particularly because this is a small district with small and, therefore, less statistically reliable sample sizes. This limitation has been noted over the years, and compensatory efforts, particularly to 'drill down' to the level of individual students, are described in district achievement contracts and the Superintendent's reports on student achievement.

The current district achievement contract describes (on pp. 2-5) the context within which it is situated and within which the district's efforts to ensure on-going improvement of student achievement will occur. As well, it refers to this research project in the Preamble (p. 2), providing some context for the decision to undertake it, and stating its purpose as being: "to help the Board of Education make an informed decision on the organization of time, now that the district has been on a 4-day week" calendar for eight years, and now that Bill 36 allows for the adoption of a three-year district calendar."

The 'District Context' section of the achievement contract refers to the 'blended' nature of many students' programs, 'achieved through a combination of electronic and face-to-face learning environments', and speaks to the influence that 'close proximity to the natural environment' has upon them. It outlines seven proposals arising out of a six-year process of 'grassroots inquiry about the nature of personalized learning'. Together, these 'context-setting items' form a 'backdrop' for the achievement goals that follow. This research project is similarly described therein as 'context-setting' in that it is expected to inform the achievement contract as it 'engages, acts, responds and adjusts' over its three-year term.

Current information about the district, and an insight into its collective character and uniqueness, and the uniqueness of the individual school communities served, is found on its newly formatted and updated website (http://sd64.bc.ca/). Here we read that "The Gulf Islands School District … is a place where learning happens everywhere. It is more than just what goes on inside the walls of the schools; it is about interconnectedness. By blurring the lines between school and community, we have made it more obvious that learning is a natural state and that it is happening all the time."

The district believes strongly that "the strong programs in our district are the glue that bind our schools and our many communities together. "Each program", it says, "as well as having its own vision, is nestled under a district-wide, common set of values and beliefs."

The words of anthropologist Wade Davis (The Wayfinders, 2009) seem to speak to the essential relationships out of which the district context arises: "Just as a landscape defines character, culture springs from the spirit of place."

Part Two: The Field Study

"To what degree does the organization of time (e.g. length of day, days in week, length of breaks) in School District No.64 affect educational outcomes?"

TABLE OF CONTENTS

The Field Study: Overview

This study was conducted in School District No. 64 during the period September 2012 – March 2013. The research question posed by The Board asks about the impact of time and its organization on educational outcomes in School District No. 64:

"To what degree does the organization of time (e.g. length of day, days in week, length of breaks) in School District No. 64 affect educational outcomes?"

The study offers some analysis of quantitative student achievement data produced at school, district and provincial levels. It involves a literature review focused on the standard school calendar, the question of summer learning loss, alternate calendar forms, and the relationship between time and learning. This review informed the development of four survey instruments which, together with focus interviews, draw on the perspectives, experiences, thoughts, and questions of a variety of stakeholders – teachers, students, parents, school and district administrators, and members of the greater community.

In total, at least 672 individuals participated in this research study. While that is the number of people who responded to the four surveys, there were others who were interviewed and, in the interest of maintaining the anonymity of survey respondents, interviewees were not asked if they were also survey respondents; thus the difficulty in providing a firm number beyond 672.

Survey Methodology

During the months of November, December and January 2012, the researcher administered four short surveys: one for elementary students (K-5); one for students in Grades 6-12; one for parents and community; and one for district employees. All but the elementary surveys were designed for on-line administration. The researcher visited all island elementary schools to administer paper and pencil fashion in the students' classrooms.

The general approach in surveying has been one of 'funneling' – posing fairly broad survey questions, analyzing the responses and considering them against what the research literature says with respect to key aspects of the research question; asking more focused, clarifying questions of individuals and groups, based upon survey findings, and analyzing these, whilst comparing results against the research literature. (Palys, 1997; add to references)

The 672 surveys were received from three district groups, as follows:

- 390 (58%) from students
- 204 (30.4%) from parents and community members
- 78 (11.6%) from district employees

Survey Results for Students

The overall district student population is approximately 1700, of whom approximately 700 (41%) are secondary level; 350 (21%) are middle years level; and 650 (38%) are elementary level. The 390 student surveys completed came from the following student groups:

- 133 (34.1%) were submitted by secondary students,
- 67 (17.2%) by middle years students; and
- 190 (48.7%) by elementary students.

A student sample of this size (390) allows for a confidence level of 99% with a confidence interval of 5.75 (thus, if 60% of the students sampled answered a question a particular way, then it can be inferred that between 52.25 and 65.75 % of the total population could be expected to answer the question the same way). Within this sample and relative to the overall student population, elementary and secondary students are proportionately over-represented, while middle years students are under-represented. This is attributed to the fact that the researcher elected to survey whole elementary classrooms on all islands that he did so by invitation, and that he had no control over the number of middle and secondary students responding electronically.

Elementary students (predominantly grades 2-5) were surveyed using a more traditional pencil and paper approach, with the researcher guiding students through the surveys in their classrooms, and the classroom teacher assisting, in particular, students more challenged by such activity. Students in Grades 6-12 were surveyed using an instrument posted on-line, as were parents and community members, and district employees.

Wherever possible, introductory text and links to the electronic survey instruments were made available through internal email networks; beyond that, they were posted on the district website, and involvement was promoted through school email networks and newsletters.

It should be noted that most students, unless they are Grade 8 age or older, or they have come to this school district from another, have no experience of school time organized differently than it has been during their time at school, against which to compare their current experience. For these students, the current approach is their status quo. Most parents, employees, and senior secondary students have experienced and can recall school time organized differently and so are able, to varying degrees and in a way that most elementary students can't, to compare their current experience with a previous one.

It is also important to note that survey respondents were given opportunities to give multiple responses; thus, the total number of responses expressed as a percentage exceeds 100% in some cases.

Survey Results for Elementary Students

Surveys were administered to 190 students enrolled in K-5 programs at 8 island elementary schools, using questions similar to those asked of older students, but simplified to ensure age-appropriateness. The grade distribution of the students sampled is based largely upon three factors: the researcher's preference to not survey early primary students; the fact that the researcher visited classes by invitation; and the grade distribution within the multi-grade classrooms visited.

A table showing the questions asked, and the frequency of students' responses appears below. When considering the data, the following should be noted:

- Questions 1, 2 and 11 required printed responses, and these are not presented in the table.
- Student responses are organized into two groups: those from 4 Salt Spring Island schools, and those from 4 Outer Islands schools. This was done in the interest of maintaining the anonymity of students in the smaller Outer Islands schools where, in some cases, there are only one or two students at a particular grade level.
- Totals exceed 190 in some cases, because students provided multiple responses to some questions (Q9 and Q10 for example) because, as some students said, 'It depends on the day.'
- There were a very small number of cases where students did not respond to a question, or spoiled their responses.

Survey About the School Year: For SD64 Elementary Students (K-5)	**Outer Island Students** **N = 79**	**Salt Spring Island Students** **N= 111**
Question One: The name of my school is _____ .		
Question Two: What Grade are you in?		
Kindergarten/Grade 1	6	
o Grade 2	12	8
o Grade 3	20	14
o Grade 4	20	15
o Grade 5	20	74
o Grade not provided	1	
Question Three. I think the school day should:		
o be longer	11	7

o be shorter	24	23
o stay the same	44	81
Question Four: Think about lunch and recess.		
o I have enough time to eat and play	51	84
o I don't have enough time to eat and play	30	35
Question Five: I think the school week		
o should stay four days	46	78
o should be five days	11	9
o could sometimes have 5 days and sometimes have four days	22	24
Question Six: I think the school year should		
o be longer	6	4
o be shorter	25	38
o stay the same	48	68
Question Seven: Think about your holidays.		
o the summer vacation should be longer	42	53
o the summer vacation should be shorter	5	3
o the summer vacation should stay the same	21	35
o a shorter summer with longer holidays during the school year would be okay	18	20
Question Eight: Think of your learning time.		
o I have enough time to get my work done	55	71
o I don't have enough time to get my work done	13	11
o I'd like more time to get my work done	18	53
Question Nine: When I get home from school		
o I am too tired to do other things	32	39
o I am not too tired to do other things	58	78

Question Ten: Think about homework. Is it usually extra work, or work you didn't finish in class?		
o It's extra	43	47
o It's work I didn't finish in class	47	46
Question Eleven: What changes to the school day, week or year, would make your learning time at school better? Print an answer in the space below.		

Elementary Students' "Other" Responses

Elementary students were afforded an opportunity to respond to Question Eleven **"What changes to the school day, week, or year would make your learning time at school better?"**

The students offered a variety of comments, many of which reflected the dominant view that things should 'stay the same.' Many students expressed their desire to see more time devoted to a preferred school subject, with Art and Gym figuring prominently.

Some students did not directly respond to the survey and research questions, offering comments such as "I would like less carrots in my lunch" and "lockers for Grade 4/5." While not directly serving the purposes of the study, they do indicate the sorts of things that younger students think about, and that matter to them.

A sample of responses directly related to the survey and research questions are grouped thematically and presented below:

The Day

- "Start school at 8."
- " An hour extra before school."
- "I would like school to start later."
- "Longer so I can finish all my work."
- "It should be longer class time."
- "Start the day later, because I get to school tired and can't pay attention."
- "Start later in the morning and go later in the afternoon."
- "School should start at 10 and end at 5."
- "9 to 3:30 in the winter, because some kids have a foot of snow and are always late."
- "Smaller recess, longer lunch."

- "Longer recess."
- "More work time."
- "Shorter days for more after school activities."

The Week

- "The four-day week lets me rest so I can focus when I get back to school."
- "Every second week, a half day Friday."
- "A five day school week would be better."
- "I want a three day weekend."

The Year

- " Keep the school year the same, so I can finish what I started."
- "It would be better if the year changed."
- "A two-month vacation."

Learning Time

- "There's too much extra time, and I get bored."
- "Less homework."
- "Whales homework."
- "More time for projects."

After School: Fatigue and Homework

Because a widely-held and often-voiced concern is that the length of the school day causes fatigue, particularly where younger students are concerned, elementary students were asked to think about "when I get home from school" and respond to one of two statements, as follows: "I am too tired to do other things" or "I am not too tired to do other things." The total number of responses to this question exceeds the total number of students surveyed because 17 students in a number of schools elected to respond to both statements, to reflect their belief that "It depends on the day."

As well, elementary students were asked whether homework, when they get it, is work assigned that day, not completed, and taken home for completion; or "extra" work such as special projects done over time. There were 183 responses. Not all students are assigned homework and, amongst those who are, there were some who responded to both statements.

Student responses to a series of statements related to fatigue and homework are presented below:

"I am too tired to do other things"

Response group	**Reponses to this question as percentage**
K-5 students, Outer Islands (N= 79)	(32) 40.5%
K-5 students, Salt Spring (N=111)	(39) 35.1%

"I am not too tired to do other things."

Response group	**Reponses to this question as percentage**
K-5 students, Outer Islands (N= 79)	(58) 73.4%
K-5 students, Salt Spring (N=111)	(78) 70.3%

It's work I didn't finish in class.

Response group	**Reponses to this question as percentage**
K-5 students, Outer Islands (N= 79)	(47) 59.5%
K-5 students, Salt Spring (N=111)	(46) 41.4%

It's extra.

Response group	**Reponses to this question as percentage**
K-5 students, Outer Islands (N= 79)	(43) 54.4%
K-5 students, Salt Spring (N=111)	(47) 42.3%

Survey Results for Students in Grades 6-12

Student responses were gathered using an online survey. Initially, a link to the survey was sent out to the schools via email; subsequently, it was uploaded to the school district website.

A table showing the questions asked, and the students' responses appears below. When considering the data, the following should be noted:

- Questions 1, 2, 13 and 14 required written responses, and these are not tabulated and presented in the table.
- Questions 5 through 12 allowed respondents to add further comments, and these are not tabulated and presented in the table. These follow the table.
- Responses to Questions 13 and 14 are presented together with those of district employees, parents and community. (Note: In those surveys they are questions 11 and 12.)

School Year Survey for SD64 Students in Grades 6-12	**Middle Years (Gr. 6-8)** **N=67**	**Secondary (Gr. 9-12)** **N =133**
Question One: What grade are you in?		
○ Six	29	
○ Seven	10	
○ Eight	28	
○ Nine		15
○ Ten		33
○ Eleven		39
○ Twelve		46
Question Two: What school do you attend?		
Question Three: Are you an international student?		
○ yes	1	5
○ no		194

Question Four: Are you in a specialized program such as SEEC, GISPA, or a course involving dual credit (such as a Secondary School Apprentice Program?		
○ yes		27
○ no		134
Question Five: Thinking about the amount of time NOW available for teaching and learning in our school, I think:		
○ there is enough time for teaching and learning	57	91
○ there isn't enough time for teaching and learning	2	16
○ interruptions to classroom teaching and learning (for example, announcements and assemblies) are kept to a minimum	10	36
○ there are too many interruptions to teaching and learning	5	2
○ the school schedule organizes teaching and learning time well	17	54
○ the school schedule could be better organized	9	37
○ other		
Question Six: When I think about the ideal school DAY, and what I value and would support, I think about:		
○ a longer school day	6	4
○ a shorter school day	14	22
○ a school day the same length as it is now	17	79
○ a more flexible school day that allows me to attend when I need to, based upon my program needs	14	83
○ other		
Question Seven: When I think about BREAKS during the school day, I think:		
○ there should be a longer lunch break	20	54
○ there should be more recess time	28	6
○ there is enough lunch time	16	39
○ there is enough recess time	4	15
○ there is enough transition time between classes	11	60
○ other		

Question Eight: When I think about the ideal school WEEK, and what I value and would support, I think about:		
○ a five-day school week	7	13
○ a four-day school week	53	110
○ weeks of different lengths (sometimes four days and sometimes five days, for example)	11	16
○ other		
Question Nine: What kinds of things do you do on Fridays (or over the longer weekend) when school is not in session?		
○ I catch up on sleep	33	70
○ I work at a job for pay	11	62
○ I do volunteer or service work	2	22
○ I do homework	28	68
○ I continue with one or more of my school programs (for example work experience, career training, language classes)	4	21
○ I participate in leisure activities (involving sports, recreation, hobbies, friends)	43	94
○ I do things to support my family (for example, shopping, housework, childcare)	28	56
○ other		
Question Ten: When I think about the ideal school YEAR, and what I value and would support, I think about:		
○ the traditional September-June year with a July-August summer holiday	48	99
○ a school year with an earlier start date (for example, one in late august)	3	5
○ a school year with a later end date (for example, one in earlier July)	3	4
○ a school year with better balance between school time and vacation time	15	19
○ other		
Question Eleven: Think about vacation time, and check one or more of the statements below:		
○ I like the vacation times as they are	46	88

○ I would like to see the vacation times changed	3	8
○ I would like a shorter summer holiday, and longer holidays elsewhere in the year	6	10
○ I forget too much of what I've learned over the summer	6	22
○ I work in the summer and need the earning time	13	78
Question Twelve: As the district considers different ways of organizing the school year, I think it should look more closely at:		
○ increasing the amount of student learning time available	7	25
○ decreasing the amount of student learning time available	4	5
○ maintaining (keeping) the amount of student learning time available	19	41
○ ways of making better, more effective use of the student learning time available	15	78
○ different ways of organizing and distributing school time and vacation time	8	25
○ other		
Question Thirteen: If there were only one thing that I could change about how school time is organized in my school NOW it would be:		
Question Fourteen: What do you most hope or wish for, when you think ahead to the way the 2013-2014 school year is organized?		

- Student responses are organized into two groups; those in middle years (Grades 6-8) programs, and those in secondary (Grades 10-12) programs; this was done to preserve the anonymity of students in schools with small populations at these levels.

Grade 6-12 Students' "Other" Responses

Additional, more detailed responses were received by way of the "other" options associated with questions 5 through 12, 13 and14. A representative sample is presented below, and students' "other" responses are further examined when the responses of students, employees, parents and community are organized thematically.

Question Five: Thinking about the amount of time NOW available for teaching and learning in our school, I think:

- "Each curriculum has too much information; some teachers succeed in teaching key components, therefore we have enough time".
- "There's not enough learning time in itself, as we only practice for tests and

exams – we don't actually learn and remember".

- "Too much time is spent doing irrelevant stuff; the time could be better used by students".
- "I need more time to learn".
- "[we] don't use time effectively".
- "There could be "less schedule", less time for teaching and more for learning and inquiry".
- "The work zones are awesome".
- "Bring back tutorials".
- "I become bored because classes are too long".
- "Interruptions are mainly created by students; if we could change that…"
- "Some teachers don't use available time effectively".
- "Keep the four-day week [MY]".
- "Five-day school week; band twice a week".
- "Absolutely need a five-day week".
- "A longer recess [MY]".
- "Longer first break [MY]".
- "Announcements are poorly timed, due to commotion in hallways".

Question Six: When I think about the ideal school DAY, and what I value and would support, I think about:

- "We need much more school time".
- "More time for core subjects and longer breaks [MY]".
- "Add a fifth block [Sec]".
- "A day that starts later and is more flexible [MY]".
- "It would be great to have a day that starts and end later [Sec.]"
- "A day any longer would be difficult for Outer Islands students [Sec]".
- "The only reason I ever "skip" is so I can go home to work with faster internet [Sec]".

Question Seven: When I think about BREAKS during the school day, I think: …

The majority of students who responded to the "Other" option said they would like:

- more time to transition between classes, and to get to and from buses and water taxis, at the beginning and end of the school day;
- slightly longer breaks
- the ability to take breaks when they need them

Question Eight: When I think about the ideal school WEEK, and what I value and would support, I think about: …

The majority of students who responded to this question's "other" option said they would like a four–day school week. One suggested a four-day week for "elementary" and a five-day-week for "high school"; and another suggested a six-day week, with shorter days overall. One student cautioned that, with a longer week, "It would be difficult to maintain our drive and be involved in school groups and other extra-curricular activities which require off-school time". The need for adequate funding, so that a five-day week could be implemented, was raised by one student, who said, "We are not a minority".

Question Nine: What kinds of things do you do on Fridays (or over the longer weekend) when school is not in session?

Students who responded using the 'other" option described a variety of activities undertaken on Fridays, including:

- teaching music and attending rehearsals and concerts, attending music lessons, and pursuing music as an interest
- attending a regular Science class; meeting with a tutor
- attending Air Cadets
- travelling to Vancouver Island with family, to visit relatives, and swim.

Question Ten: When I think about the ideal school YEAR, and what I value and would support, I think about: …

Students used the "other" option to advocate for a variety of approaches to the school year. These generally involved continuing with the traditional approach (September-June; with a two-month summer holiday), whilst trying to find a better balance between instructional time and vacation time. One student suggested that the summer vacation should shift to better coincide with the beginning and end of summer, and another suggested it should start "2-3 weeks earlier". One argued for a longer summer holiday, and one said that there should be no long break between school years because students "lose too much of what we learn in two months". Several students suggested ways of shortening the summer and re-distributing the time elsewhere in the school year. One student said, "As it stands, the

traditional year works and if it ain't baroque [sic] don't fix it" and another said, in the same vein, " There's a reason why it's been around a long time … IT WORKS!"

Question Eleven: Think about vacation time, and check one or more of the statements below: …

"Other" responses to this question were similar to those in Question Ten, but more focused on the summer vacation. One student reflected, "…. while it's hard to imagine a shorter summer, more "mind rest periods" during the year would be beneficial". Another said, " I like the long summer vacation, but forget what I've learned and it's hard to get back into a school state of mind". Several others, perhaps responding to this school year's late Winter Vacation start date, advocated for an earlier Winter Vacation start date.

Question Twelve: As the district considers different ways of organizing the school year, I think it should look more closely at: …

One student took this opportunity to advocate for a five-day school week, and two said, 'keep things the way they are'. A number of secondary students focused on Work Zones, and offered suggestions for improvement. Two middle years students asked for more time in several subject areas (Art and Phys Ed.).

Survey Results for District Employees

Responses from 78 district employees were gathered using an online survey. Initially, a link to the survey was sent out to the schools via email; subsequently, it was uploaded to the school district website.

A table showing the questions asked, and the employees' responses appear below. When considering the data, the following should be noted:

- The "Other" Employee Group is comprised of those employees who did identify themselves as fitting neatly into either a GITA or CUPE group. District office employees are amongst those in this group.

- Questions 5 through 12 allowed respondents to add "other" comments, and these are not tabulated and presented in the table. Summarized responses to questions 5 through 10 follow the table, and are further examined when the responses of students, employees, parents and community are organized thematically.

- Responses to Questions 11 and 12 are presented together with those of students, parents and community. (Note: In the Grade 6-12 students' survey, these are questions 13 and 14.)

School Year Survey for SD64 Employees	GITA members N=44	CUPE members N=19	Other N= 15
Question One: I am responding as:			
○ a GITA member	44		
○ a CUPE member		19	
○ a school-based employee			9
○ an employee who is not school-based			2
○ I am a district employee who is also a parent of one or more SD64 students			3
○ other			1
Question Two: I am most closely associated with:			
○ a K-12 school on Saturna, Pender, Mayne or Galiano Islands	5	4	3
○ an elementary school on Salt Spring Island	16	8	3
○ SIMS	7	2	1
○ GISS	15	5	6
○ Windsor House School			2
○ I don't have a close association with a particular school			1
Question Three: Thinking about the amount of time NOW available for teaching and learning in our school, I think:			
○ there is enough time for teaching and learning	14	5	3
○ there isn't enough time for teaching and learning	26	2	2
○ interruptions to classroom teaching and learning (for example, announcements and assemblies) are kept to a minimum	17	6	2
○ there are too many interruptions to teaching and learning	9	2	
○ the school schedule organizes teaching and learning time well	14	8	3
○ the school schedule could organize teaching and learning time more effectively	18	3	1
○ other			

Question Four: When I think about the ideal school DAY, and what I value and would support, I think about:			
○ a longer school day	1	1	
○ a shorter school day	12	1	
○ a school day the same length as it is now	25	14	3
○ a more flexible school day (for example, one that allows students to attend when they need to, based upon their program needs)	10	3	5
○ other			
Question Five: When I think about BREAKS during the school day, I think that:			
○ there should be a longer lunch break	6	2	
○ there should be more recess time	6	2	
○ there is enough lunch time	30	11	1
○ there is enough recess time	22	8	
○ there is enough transition time between classes	16	3	1
○ there isn't enough transition time between classes	4	2	
○ other			
Question Six: when I think about the ideal school WEEK, and what I value and would support, I think about:			
○ a five-day school week	11	3	2
○ a four-day school week	24	12	9
○ weeks of different lengths (sometimes four days and sometimes five days, for example)	8	3	1
○ other			
Question Seven: Most students do not attend classes on most Fridays, and a longer weekend results. Please consider the following statements. Check one or more that "ring true for you".			
○ The longer weekend represents a longer student "learning gap".	8	1	1
○ Students benefit from the longer weekend by having more time to pursue other interests and activities, including employment.	37	12	5

○ The longer weekend allows for greater balance between my work and my personal life.	40	13	5
○ Students not being in school on Fridays may cause difficulty for some families.	16	6	
○ Families and community have adjusted well to students not being in school on Fridays.	31	10	5
○ Teaching and learning are compromised by the "compression" of five school days into four days.	13		1
○ Teaching and learning are not compromised by the "compression" of five days into four days.	19	10	3
○ Other			
Question Eight: When I think about the ideal school YEAR, and what I value and would support, I think about:			
○ the traditional September-June year with a July-August summer holiday	27	13	6
○ a school year with an earlier start date (for example, one in late August)	3	1	
○ a school year with a later end date (for example, one in earlier July)	2	1	3
○ a school year with better balance between school time and vacation time	16	6	8
○ other			
Question Nine: Think about vacation time, and check one or more of the statements below:			
○ I like the vacation times as they are.	22	8	5
○ I would like to see the vacation times changed.	7	1	
○ I think that the summer vacation is too long and results in a student "learning gap".	11	4	1
○ I would like to see a shorter summer holiday, and longer holidays elsewhere in the year.	20	2	
○ The current summer vacation allows teachers and other staff enough time to pursue professional development opportunities, and have "down time".	29	10	6
○ I think the current summer vacation allows students opportunities to pursue other activities and interests, including employment.	29	12	6
○ Other			

Question Ten: As the district considers different ways of organizing the school year, I think it should look more closely at:			
○ increasing the amount of student learning time available	7	2	4
○ decreasing the amount of student learning time available			
○ maintaining (keeping) the amount of student learning time available	22	9	4
○ ways of making better, more effective use of the student learning time available	22	12	7
○ different ways of organizing and distributing school time and vacation time			
○ other			
Question Eleven: If there was only one thing that I could change about how school time is organized in my school NOW it would be:			
Question Twelve: What do you most hope or wish for, when you think ahead to the way the 2013-2014 school year is organized?			

District Employees' "Other" Comments

Additional, more detailed responses were received by way of the "Other" options associated with questions 3 through 9, 11 and 12.

Question Three: Thinking about the amount of time NOW available for teaching and learning in our school, I think:

Two employees commented that, for them, time isn't the most important consideration. A GITA member commenting on learning at the secondary level said, "the most important focus … is IF and HOW learning takes place, not WHEN". In a similar vein, a CUPE member said that "time is not the factor, class size and composition is". Others commented on perceived inefficiencies in the GISS timetable, noting that "students would like more flexibility and choice" and that "work zones are a waste of teaching and learning time" and that "the timetable causes competition between performance and academics" which should be avoided, "so students can do well in both".

Question Four: When I think about the ideal school DAY, and what I value and would support, I think about:

The six "other" comments submitted focused on days structured differently, to better

meet the needs of students, and more time for learning. These included: "students should arrive at optimal times for them", and "there should be different timetables for different needs". Several K-8 level comments called for "a more academically-focused morning", "more class time"; and "a longer day".

Question Five: When I think about BREAKS during the school day, I think that:

Six of ten "other" comments focused on a desire for greater flexibility where breaks are concerned. Two advocated for a longer lunch; one to allow for clubs, and the other in conjunction with a suggestion that two recesses should be reduced to one. One GISS respondent said that "a more flexible schedule would eliminate the need for transitions" and another said that "homeroom is a waste of time, given the time lost to the transitions and announcements associated with it."

Question Six: when I think about the ideal school WEEK, and what I value and would support, I think about:

The eight "other" responses included these ideas:

- A five-day week for elementary and middle years, and a four-day week for secondary
- An optional fifth day offering school access for secondary students
- A four-day week based upon manageable class size and personalized learning principles
- A four-day week with year-round school
- "If learning for life is 24/7/365, then "school" is all the time. We need to value all learning that students do all the time [whether at school or not]".

Question Seven: Most students do not attend classes on most Fridays, and a longer weekend results. Please consider the following statements. Check one or more that "ring true for you".

Seven "other" comments included these ideas:

- "class size and educational changes compromise teaching and learning, not the number of days"
- no school on Fridays means no TOCs are needed to cover classes that would otherwise be in session when coaches travel with athletic teams
- [the four-day week] "has been an opportunity to change how we think about and approach education and learning"
- "Much as I love Fridays off I feel that, for many 'at risk' students, a fifth day of repetition and reinforcement is necessary"

- The days [in the four-day week] are too long for elementary students
- "Many students don't show up when we have school on Fridays"
- "students learn a lot on weekends, too"

Question Eight: When I think about the ideal school YEAR, and what I value and would support, I think about:

Consistent with what employees said about wanting to preserve a traditional school year, but effect a better balance between school time and holiday time, ten "other" comments included seven suggestions regarding ways the school year could be modified, and three advocating for the traditional two-month summer holiday.

Question Nine: Think about vacation time, and check one or more of the statements below:

"Other" comments focused on maintaining the current summer vacation, and on the two–week Spring Break, with one respondent saying "keep it" and another saying "it's too long". One advocated for an August start date, to facilitate a break sometime before Christmas. One respondent focused on the idea of a summer learning gap, saying, "District resources for students who experience learning gap would be worth pursuing".

Question Ten: As the district considers different ways of organizing the school year, I think it should look more closely at:

Four responses advocated for greater flexibility; more teachers; outdoor, experiential learning as a way of maximizing learning with the time currently available; and recognition that "it's not about time, it's about class size and changes to the education system that reflect today's needs".

Survey Responses from Parents and Community Members

Responses from parents and community members totaled 204. These were gathered using an online survey. Initially, a link to the survey was sent out to the schools via email, with a request that it be publicized through the school's own network; subsequently, it was uploaded to the school district website.

A table showing the questions asked, and the responses appear below. When considering the data, the following should be noted:

- Responses are organized into three groups: parents, community members, and others, who identify themselves as being some combination of the two.
- Questions 3 through 10 allowed respondents to add further comments. These are summarized following the chart, and further examined when the responses of students, employees, parents and community are organized thematically.

- Responses to Questions 11 and 12 are presented together with those of students and district employees. (Note: In the Grade 6-12 students' survey, these are questions 13 and 14).

School Year Survey for SD64 Parents and Community Members	**Parents** **N=161**	**Community Members** **N=22**	**Others, incl. combinations** **N=21**
Question One: Please check one or more of the statements below, to give us a sense of who you are.			
○ I am responding as a parent or guardian of one or more students in SD64.	148		
○ I am the home-stay parent of one or more International students.	13		
○ I provide recreational or other programs to students outside of school.			1
○ I employ students.			5
○ I am responding as a member of the community, rather than as a parent.		22	
○ Other (incl. graduates, grandmothers, health providers, SD64 parents-to-be, retired employees, water taxi staff)			15
Question Two: Where do you live?			
○ Saturna Island	4		
○ The Penders	10		
○ Mayne Island	12		
○ Galiano Island	3		
○ Salt Spring Island	121	21	19
○ The Southern Mainland (for example, where Windsor House School is concerned)	11		
○ Vancouver Island (for example, Crofton)			3
Question Three: Thinking about the amount of time NOW available for teaching and learning in our school, I think:			
○ there is enough time for teaching and learning	69	10	5
○ there isn't enough time for teaching and learning	47	5	
○ interruptions to classroom teaching and learning (for example, announcements and assemblies) are kept to a minimum	13	3	3

○ there are too many interruptions to teaching and learning	18	5	2
○ the school schedule organizes teaching and learning time well	43	5	2
○ the school schedule could organize teaching and learning time more effectively	49	10	8
○ other			
Question Four: When I think about the ideal school DAY, and what I value and would support, I think about:			
○ a longer school day	5	2	
○ a shorter school day	29	4	6
○ a school day the same length as it is now	90	8	9
○ A more flexible school day (for example, one that allows students to attend when they need to, based upon their program needs)	31	10	9
○ other			
Question Five: When I think about BREAKS during the school day, I think:			
○ there should be a longer lunch break	27	3	8
○ there should be more recess time	23	4	3
○ that there is enough lunch time.	84	14	12
○ there is enough recess time.	70	10	10
○ there is enough transition time between classes	42	7	8
○ other			
Question Six: When I think about the ideal school WEEK, and what I value and would support, I think about:			
○ a five-day school week	53	10	8
○ a four-day school week	90	9	13
○ weeks of different lengths (sometimes four days and sometimes five days, for example)	15	3	2
○ other			
Question Seven: Most students do not attend classes on most Fridays, and a longer weekend results. Please consider the following statements. Check one or more that "ring true for you".			

○ The resulting three-day weekend represents a longer student "learning gap".	45	11	8
○ Students benefit by having more time to pursue other interests and activities, including employment.	86	9	8
○ Students not being in school on Fridays may cause difficulty for some families.	47	14	11
○ Families and community have adjusted well to students not being in school on Fridays.	83	15	4
○ School staff probably benefit by having more time to balance their work and their personal lives.	58	14	6
○ Other			
Question Eight: When I think about the ideal school YEAR, and what I value and would support, I think about:			
○ the traditional September-June year with a July-August summer holiday	102	12	16
○ a school year with an earlier start date (for example, one in late August)	17	2	1
○ a school year with a later end date (for example, one in earlier July)	16	2	2
○ a school year with better balance between school time and vacation time	47	8	7
○ other			
Question Nine: Think about vacation time, and check one or more of the statements below:			
○ I like the vacation times as they are.	74	7	14
○ I would like to see the vacation times changed.	21	2	2
○ I think that the summer vacation is too long and results in a student "learning gap".	36	3	6
○ I would like to see a shorter summer holiday, and longer holidays elsewhere in the year.	38	7	5
○ I think the current summer vacation allows students opportunities to pursue other activities and interests, including employment.	73	11	11
○ other			

Question Ten: As the District considers different ways of organizing the school year, I think it should look more closely at:			
○ increasing the amount of student learning time available	43	6	7
○ decreasing the amount of student learning time available	1		
○ maintaining (keeping) the amount of student learning time available	85	6	10
○ ways of making better, more effective use of the student learning time available	98	13	21
○ different ways of organizing and distributing school time and vacation time	44	2	14
○ other			
Question Eleven: If there was only one thing that I could change about how school time is organized in my school NOW it would be:			
Question Twelve: What do you most hope or wish for, when you think ahead to the way the 2013-2014 school year is organized?			

"Other" Comments from Parents and Community Members

Additional, more detailed responses were received by way of the "Other" options associated with questions 3 through 9, 11 and 12.

Question Three: Thinking about the amount of time NOW available for teaching and learning in our school, I think:

Several respondents indicated that they don't have enough information to comment; one expressed hope that the time available is being used "to educate rather than baby-sit"; another said there's sufficient time if it's used constructively; several commented on the length of the high school day, with one asking for a more efficient schedule; and two advocated for a five-day week.

Question Four: When I think about the ideal school DAY, and what I value and would support, I think about:

One parent commented that the day should be long enough to allow teachers to get through courses; one said the day is too long for younger students; another advocated for increased, unscheduled personal choice at the end of a shorter day.

Question Five: When I think about BREAKS during the school day, I think:

There were no additional comments offered in relation to this question.

Question Six: When I think about the ideal school WEEK, and what I value and would support, I think about:

Respondents advocated for both maintaining the four-day week (and the 4.5 day week in the case of Windsor House) and returning to a five-day week. One said that, while he/she preferred a five-day approach, "after 8 years it would be hard to get used to it". Several responses were qualified: one advocated for the four-day week "if there is more support for primary"; another for a five-day week, with the fifth day being optional; and another for a five-day week for elementary and middle school, and a four-day week for secondary.

Question Seven: Most students do not attend classes on most Fridays, and a longer weekend results. Please consider the following statements. Check one or more that "ring true for you".

"Other" comments were wide-ranging: one respondent advocated for "an entire new set up"; and another for "whatever works, as long as it doesn't involve a five-day week". There were numerous suggestions of ways to better balance school time and holiday time over the course of the year, as well as ways to either maintain or shorten the summer vacation. Those advocating for a shorter summer suggested longer breaks elsewhere in the year. Those advocating to either maintain or lengthen the summer vacation argued that this "large block of unscheduled time" offered "opportunities to learn new skills" beyond those learned in school. Suggestions that the summer vacation be shifted included moving the start date backwards into June or May "like the States", or forwards into July; and moving the end date either backwards into August, or forwards into September.

Question Eight: **When I think about the ideal school YEAR, and what I value and would support, I think about:**

Respondents offered a variety of suggestions regarding the length of summer and when it should begin and end. One suggested, "a 12-month school year with a long break between semesters" and another "With either a four-day or a five-day week, a system of 45 days of instruction, followed by 15 days off". One observed that, "6 weeks of time away from school is enough" and suggested a more balanced distribution of school time. Another said, " Whatever works that doesn't involve creating a five-day week".

Question Nine: Think about vacation time, and check one or more of the statements below:

One respondent said that "extending the school year into the summer season would be a detriment to learning" and another said that making the summer vacation "a week shorter would not alter the learning gap". A grandmother/volunteer said that [needs] differ according to the age of the students".

Question Ten: As the District considers different ways of organizing the school year, I think it should look more closely at:

There were 6 additional comments, including one advocating for greater flexibility within the school day; and one for self-directed learning. One parent advocated for reinstatement of the five-day week.

The Last Two Survey Questions: Themes Emerging

The last two questions were numbered 13 and 14 on the Grade 6-12 student survey, and 11 and 12 on the Employee and Parent and Community surveys.

There were two questions, one asking respondents to focusing on the present, and the other asking them to think ahead to the next school year. The two questions are as follows:

Question: "If there were only one thing that I could change about how school time is organized in my school NOW it would be: …."

and

Question: What do you most hope or wish for, when you think ahead to the way the 2013-2014 school year is organized?

There was considerable overlap in the content of responses to both questions and, in the interest of brevity, these have been combined and arranged thematically. The questions drew wide-ranging responses from students in Grades 6-12, district employees, and parents and community.

Most used this question as an opportunity to elaborate on their responses to the survey's other questions, and to share their experiences, and express their feelings, and sometimes, fears. One parent, for example, commented, " I think it would be good if there was a place set up for students to go if they can't make it home (i.e., if the ferries are shut down) where they would be able to do home work, and spend the night".

One respondent offered a comprehensive "12 Step Program for Public Education" explaining "Some of it is rather tongue in cheek; some is more serious. Even my most ridiculous suggestions have elements of truth to them".

Representative samples of those responses most directed at school year organization are arranged thematically and presented below, in the interest of 'reflecting those nuances' called for in the comment above. To preserve anonymity, responses are grouped, generally, as being from students, employees, and parents (including community).

Maintain the Status Quo

Some respondents advocate for preservation of the status quo, and give reasons why.

Employee: " I am happy with the way my school is currently organized".

Student: “My only wish is that school stays the same”.

Student: "I wouldn't change anything, I'm in grade 11 and have always enjoyed the way things are learning wise, I like summer break. I don't want to get out any earlier or later. I like the four-day school week, because as a high school student it gives me the Fridays off to work, in middle school it made me not have to miss school to get my braces checked”.

Student: “I want things to remain the same for my Grade 12 year, please don't change anything. Throughout my school career things have been changed and ripped from under my feet and I just want things to stay the same for ONE more year until I graduate. I'm aware I'm not the only person in the world, but you're asking me MY opinion, and this is my opinion”.

Student: “I wouldn't change it because I like the way it is. I have arranged my courses to be what I want them to be. I would like to be able to get up later, but that isn't practical because I think high school is meant to prepare us for the real world, and we will have to be getting up just as early or even earlier for our jobs in the future”.

Parent: “I wouldn't change a thing. My kids have moved here from a school in Nelson that had a four-day week and long vacation times. It's very important to our family that there is a balance between school and learning opportunities in their "out of school" lives. We may live on Salt Spring, but 3 of my kids attend school on Saturna and I feel that they very much need a weekday where they don't have to get up at 5 a.m. They use Fridays to have lessons here on Salt Spring and to do school work”.

Change Perceptions

Several respondents said that they would like to change perceptions of those responding to the public education system.

Employee: “That parents, teachers, students, administrators and our board value the process of education more. I am a musician and if I do not practice things can go very, very badly. We need more time to practice on school. We need more time to get together. We need less of me and more of we”.

Parent: "I would like to change the perception that learning only happens in school. The problems are associated with the logistics of institutionalized learning, and the fact that we have a five-day workweek, not that more school is better for children”.

Parent: “…. that the education system will explode open and drop old views of what learning looks like and the people keeping this system going will want to do many changes beyond 'a week shift' here and 'an hour less' there!”

Parent: “Making people realize that children learn in many different ways, not just during the time they are actually in formal school, and that quality time spent with parents and mentors can be just as educationally valuable as some of the time-wasting done in school. I don't mean to suggest that all time spent in school constitutes a waste of time, but some of it does”.

Parent: “To recognize that the current mainstream system doesn't always work for all students”.

Implement Change

Employee: I hope that our primary foundation would be "the students". Let's not create some cool, innovative, out of the box type of structure just so our district looks brave and progressive to other districts. If it is educationally sound and benefits the students, let's do it. If it is not, then we should not".

Employee: "That we take what we have that is working for us, and round up to the next best plan. We have a great district and should be proud of what we have accomplished so far".

Employee: "Transformational change is needed. We should not be tinkering under the hood of the 150-year old vehicle that is our current educational model, but we should be designing a completely new vehicle for educating our youngsters. My hope is to see a clear and decisive step towards that new vehicle in the coming year. One main focus: how our plan will positively influence students' learning based on the gathered quantitative analysis of implemented programs/ school year organization from other districts or external sources".

Student: "I'll be in Salt Spring high school next year I don't even know what to expect for next year at all .... I just hope that I have enough breaks I guess and I won't have to rush too much and I'll still have freedom to go as I please at lunch".

Parent: " [If] big changes, have students be taught new expectations, taught and guided through achieving new expectations and processes, and how to be accountable …"

Parent: "Somehow, and I don't know how this could be best created, but I'd like to see more conversations taking place between educators and parents. I personally have a great relationship and communicate frequently with my son's teacher, but my daughter has had some genuine challenges this year that I still feel have not been fully addressed. I personally find it challenging to attend meetings after school hours (as I have my children with me) – perhaps creating a day where children can be cared for while parents can speak freely with their teachers may work? "

Employee: "Having sufficient time to continue to work on developing 21st century learning strategies as they apply to Late French Immersion (including scheduling)". And "…. a week before the ""official"" start of the school year in which teachers meet with parents and students to consult on student learning plans for the year".

Employee: " I wish for more school-based / curriculum-based afternoon time slots with colleagues to collaborate, etc. "

Student: "I hope that it will be organized in such a way as to make students actually want to come to school and learn, because, as one of my favorite quotes goes, "We want to see children in the pursuit of knowledge, and not knowledge in the pursuit of a child". This is VITAL to make schools better".

Employee: "My wish, frankly, would be for no schedule change (except perhaps for a longer lunch one day per week so we could run clubs) to avoid disruption. The change would have to have some far-reaching benefits to make it worth any sort of upheaval".

Parent: “I hope and wish that school boards would stop experimenting with systems when they have no idea what the effect will be, either long-term or short-term for the students”.

Equity

Employee: “My hopes and wishes are not about time but technological resources (i.e., computers, iPads, smart boards, projectors for laptops etc that sort of thing) resources which seem to be available at GISS but not in elementary schools”.

Structure

Employee: “I wish that it would basically follow the same timetable/calendar for the elementary schools and have a bit more flexibility for the high school schedule so that students don't necessarily have to be there for all five blocks everyday”.

Parent: "For the district to not go so unstructured that it has a more open curriculum and eliminates report cards as a means to evaluate learning. I'm concerned that kids won't have the initiative, motivation, and self-management to follow through. I think kids need structure and external motivation. While some kids may thrive with less structure, some thrive with more. I'm concerned about kids getting 'dumbed down' and expectations will be lowered”.

Student: “Getting rid of the traditional class structure. Students need to learn on an individual level with educators working in a mentor role, and also giving lectures and running labs. This would allow for students to excel, and find a passionate learning experience. I know from experience that in many of my classes, the time is wasted for the entire block because I could have been doing something better with my time in another course or in a volunteer group. It's not only inefficient, but also stressful on the students”.

Parent: “I wish that the semester system could be dropped. For example, I find that when my sons take a math course the first semester and no math the second semester, much of what they learned gets forgotten. I've noticed the same thing with band .... lots of progress and interest when my youngest son is taking band but a drop in motivation and practicing when he is in a semester without band. Much better continuity when the subject is taught all year”.

Parent: “That STRUCTURE is key to freedom. And that student timetables & learning groups are truly individualized so that no students are left floundering in too much freedom”.

Employee: “More structured instructional time, no [GISS] "work zones”.

The School Day

Employee: “At the elementary level, a shorter day from 8:15 to 2:00, morning recess and 45 minute lunch, 5 days a week”.

Parent: “An earlier start for high school students. As in Germany, an earlier start means more free time in the early afternoon to get homework completed, extra curricular activities, work, sunlight, eating a healthier, larger meal in the middle of the day”.

Parent: “5-day school week with school starting later. 8:15 is too early for primary children to be at school, they are falling asleep on the way home in the afternoon. Shorter recess times and longer lunch, not enough time for kids to eat their lunches now”.

Employee: “An academic focus in the morning; more active / activity / project-based learning in the afternoon; so change the timetable to suit this".

Employee: “I would change the bell times at my elementary to accommodate a longer morning. That is my preference but am flexible”.

Employee: “Continue with larger learning blocks, one block before morning nutrition break and one after. One block in the afternoon, excepting exploratory days”.

Employee: “Students would have a longer recess. Students would be able to use exploratory activities during the afternoon or Friday morning for reinforcement of the basics in small learning groups”.

Employee: “Less rigid scheduling of recesses and lunches to allow students that are highly engaged an opportunity to work uninterrupted”.

Employee: “Recesses should be 20 minutes long. Lunch should be a full 15 minutes to sit and eat, not cram and run, as well as 45 minutes play time”.

Employee: “Different recess times for the younger and older class, so that they can be taken when needed, not when prescribed. Although, I know my school would support me in doing this if I asked”.

Parent: I think that the length of the [elementary] day is definitely long enough, but I am consistently horrified at the way the time is allotted for kids over lunch. It is unhealthy to give the kids only 10 minutes to eat. Both children of mine have said over and over through the years that they do not have time to eat their lunch”.

Parent: “I think there should be more time dedicated to the kids (especially younger) to eating their lunch and not having to share this time with curriculum”.

Parent: “Children should be allotted at least 20 min. to sit and eat their lunches, before being thrown out of the class room. Any new schedule should accommodate this”.

Parent: “My daughter… almost always comes home with a mainly full lunch container, and this worries me as a parent because it is not healthy for anyone's blood sugar levels, nor is it good for a young body to go that long without proper nourishment. This does not support learning”.

Parent: “Giving students more time to EAT. 10 minutes at the Middle School is not enough. If they are going to eat in the classroom anyway, why not give them 1/2 hour to run around, and then let them eat while the teacher reads or they watch something informational. That's what they do in the elementary schools...why suddenly change it?”

Employee: “Young students get tired with a longer day, and many find the time allotted for

lunch eating is too short. So, a flexible schedule that balances 4- with occasional 5-day weeks might provide time for longer lunches while giving families more "down time" together with 3-day weekends".

Employee: ""A more effective use of our current four-day week and a more effective use of Work Zone time".

Student: "To change how the day is broken up into 1:15 minute long periods. This kind of learning is silly. Right now, this is enforcing the habit of thinking intensely about one thing, but as soon as that bell rings, completely ignore what you were doing before and focus on something else. Rinse and repeat. We need a better system than this".

Parent: "A hybrid for students to do a co-op style work placement. For instance, for cook apprentices, mornings in school afternoons in the workplace".

Parent: "Have the high school day end at the same time as the middle and elementary school. I pick up 2 children from middle and elementary, then have to wander around in town for almost an hour to pick my high school student".

The School Week

Student: "I honestly wish for the school year to stay exactly the same. I believe that all of the students and anyone connected to children in the school would agree that most of us have created our lives in school upon having Fridays off. That is our day that we schedule appointments and such and I believe that we should definitely keep this day as a non-school day".

Parent: ""I don't care about the time, it can be argued both ways – four or five days. I care about the lack of support with the shortened week. I believe that the district has been remiss in not giving sufficient support to primary students from the day they began the four-day week. Sustaining the secondary programs was essential but waiting this many years to determine whether there was an impact on primary kids is inexcusable. Those kids are now in high school. There should have been a check-in after a couple of years and then again after a couple more. For a system that supports evaluation, SD 64 gets an F".

Employee: "I wish that more consideration would be given to the desperate situation that elementary special needs students, and students who need learning assistance, are in, in this district. I believe that because we operate on a 4-day week, this has been a detriment to these students. Due to funding priorities, there never seems to be enough EA help/specialty services, including counseling, etc. in the elementary classrooms to accommodate the alarming growth of needs that exist in all of the elementary schools. It seems that all of the focus in the last 5 years has been on the high school 'constructivist' programs. More and more of the younger students are 'slipping through the cracks'. Some simply don't have enough time and extra support at school to learn how to read and write during the primary grades. Even the Early Success programs seem to have lost their funding!! These young students lose so much over the three-day weekends and it is not caught up by the end of the school year. By the time they reach the intermediate grades they are struggling academically, their self-esteem is low and some become behaviour issues in the classroom, which greatly affects the

rest of the learners in that peer group. I think this is shameful and to my knowledge, no one has been keeping track of this situation in the years that this district has operated on a reduced week. Those of us who have taught at this level before and through this era, to my knowledge, have not been asked for our professional opinions. My prediction (for what it's worth, but you asked) is that as these students reach high school, there will be a realization that 'personalized, individualized programs' (like the ones we've been hearing about at GISS) will fall apart for those learners who lack the basic skill levels required to be successful self-managers. The Public School system certainly has its flaws and needs to go through some growing pains; however, we can't ignore the importance of the youngest and most vulnerable learners in the system. I firmly believe they need a solid foundation of academic, social, and emotional skills on which to grow and learn. I know a 5-day school week gives them a better chance to do this".

Parent: "I don't care if it is 4 or 5 days – just give those kids the support they need in primary and make sure they learn how to read before leaving primary".

Employee: "Don't change the school week. Whether 4 or 5 days, kids just need more attention of the right kind. Funding another survey for students and community about class size would serve to highlight the true needs for education. …. educational concerns more logically need to address class size for this changing system and society".

Parent: "Consideration for families where 4 days in school causes hardship and negatively affects more vulnerable students".

Parent: "More support on Friday's for families that are challenged to find activities for their children while they are at work".

Employee: "That it is similar to the way it is now, but possibly a return to the 5-day week. I think young children, special needs children and low socio-economic children are not well served by the four-day week, too long in between and the school day is too long for them to keep their little autonomous selves together!"

Student: "I'd like to see the four-day school week maintained. It would be too weird for us to have more than that. Not to mention, everyone would be really grumpy".

Former Student: "Having gone through school [from K-12 on SSI] I think, the way things are organized now, students have an ideal amount of school and personal time. I found it very convenient to have a 3-day weekend. I turned that time into a 3-day work week. It was very useful for me to have that early start in the workforce and I think that the students of tomorrow are going to find that even more important in the future, unstable economy".

Parent: "Maintain the 4-day school week. This is vital to the way island children learn, engage with the community and pursue extra-curricular interests. Reverting to a 5-day school week would see THOUSANDS of families seeking an alternative to public schooling, resulting in under-utilized, invested resources and a financial impact to Friday programming providers in the community".

Parent: "I like the 4-day school week, and I like the holiday schedule. I feel the high schoolers have a very long day, especially those that live off island or on the south end. (We are on the south end, and my children leave by 8 am and return at 5 pm). My children finish most of their homework at school, which is good because they need some down time after the long days. I appreciate the [GISS] work/study blocks that are mandatory".

Student: "I like the four-day school week in high school but thought that in middle school and elementary school ... kids in grades kindergarten to grade 7-8 should have a 5-day school week to get into the swing of things in the real world. It's not like they're old enough to work on the Friday they are getting off anyways, so they don't really have a reason to have that day off".

Employee: "The four-day week produces a longer day which is hard for kinders and grade ones; last hour of the day especially in the first term is quite difficult for little ones. Personally I like the four-day school week but I wonder if this is at the cost of my students. I'm concerned about stress caused to students, which might have great impact on their lives. Current research indicates that anxiety of children at all ages is increasing exponentially and I don't want to be a contributor to this".

Parent: "I am some-what OK with the four-day week for high school because of the versatility for alternate learning possibilities. For the middle school and especially the elementary schools the four-day week is a very clear case of doing what is not in the best interest of child education. Quality liberal education is a cornerstone of the success of our Canadian democratic society and I am personally ashamed of the four-day week".

Parent: "A rotating 4- and 5-day week to increase amount of time at school learning. I worry about the education my children receive on the Gulf Islands. … I also have concerns about the teachers spending so much time with children who clearly have a need for special support and the other children are not getting what they need".

Employee: "My biggest concern is that with the four-day week, too many students find the long weekends difficult. Monday's are usually our hardest days".

Parent: "I believe that it is the most vulnerable children who suffer from having a shortened school week – young elementary children, children who have some difficulty with learning especially in the language arts area, children who finish elementary school without a working ability to read and write, and all children who tire of a longer school day".

Parent: "I find that the stat Mondays are difficult, the long weekend results in exhausted kids going into a five-day week to make up for it. I support the four-day week because we are accustomed to it, I don't like the changes of 5/4".

Student: "Another idea was to make the high school week 5 days, but leave the Friday an optional day/a day to work on homework and such, so that we could also get our day of work in on the weekend and not spend it doing homework. That way we could get homework done in a quiet working environment and easily ask a teacher for help".

Parent: “I believe children of all ages should be exposed to the creative arts and have opportunities to explore learning in many different environments but we also have the responsibility to ensure that every child be given the opportunity to succeed in the basic areas of education and provide a school week that is most likely to bring this about”.

Parent: “I don't agree with the 4-day week. I don't believe the fifth day is being made up. There is way too much emphasis on play and not enough on learning. Kids in the middle school age do not, in my opinion, need as many breaks as the primary kids, and should not be getting 2 recesses and a lunch and so on”.

Parent: “For Windsor House I wish the half-day was Friday & not Wednesday”.

Parent: “I would like Windsor House to have full Wednesdays as I work full time so presently the kids are at home unsupervised for the entire day”.

Student: “Returning to a five-day school week, allowing the work we need to cover in a term to be done properly, without feeling rushed and overwhelmed. It does seem that the curriculum for each class is not planned well enough to allow us to cover what we need to cover in the time provided”.

Parent: “Go back to a five-day school week. Concentrating the week into four longer days as opposed to five shorter days, does not result in the same learning. Students get tired and are not as able to take in the information in a longer day, compared to a new fresh day. As the parent of young children and a child that recently graduated, I have seen both ends of the spectrum, and by only having school for four days a week doesn't prepare them well for the work force, or being educated elsewhere. They become 'used to' having three days off instead of two. In many other places in the world, they actually go to school for 6 days/week. I have to believe that this places our kids at even more of a disadvantage”.

Parent: “As I noted before, because our [child] is in SEEC and hopes to remain there until the end of Grade 12 … , I would love to see a flexible Thursday schedule that allows students from non-conventional programs to 'drop in' at the high school and take courses they are not able to take otherwise”.

Employee: “Go back to the 5-day week with 6 hour days”.

Parent: “A return to the 5-day school week giving the students an example of hard working, committed teachers who are willing to return to what they know is best for their students. That this would happen with the teachers/administration being clear and happy about their professional duties and decision to do this”.

Parent: “If a five-day school week happens, I'll pull my children out of public school and home school them. I've done it before. I'll do it again”.

Parent: “Families who do not have a large income struggle to pay for child minders or programs for the fifth day of what is still the usual work week for many or to pay for tutors to enable their children to cope with the lessened week of education. Some families leave the island or stop seeing it as a place to live because of the above reasons”.

Parent: “Return to Friday schooling on Salt Spring, which would be easier on elementary school students and help fix many of the timetabling struggles at GISS. Perhaps Fridays could be Work Zones/project time”.

Parent: Return to the 5-day school week like most other effective school districts and protect our young people from misinformation about the so called benefits published in the local media. In so doing, the school days can be shorter in the afternoon so their brains aren't overloaded after 3:30. The high school's work zones aren't productive times anyway. The kids could do their homework at home which they mostly still have to do because of the inadequacy of these workzone hours.

Parent: Returning to the Five-Day School Week with better organization of classes within the time frame but allowing some personalized learning in middle school, increasing it Grade 9 and 10 and full expanding it in Grade 11-12.

Parent: “Eliminate 4-day week and go to shorter days and perhaps slightly shorter summer holiday with a start date in August. Gaps are too wide and result in poorer learning outcomes”.

Employee: “ A four-day week where the day off is always Friday, not sometimes Monday. Have all the 5-day weeks towards the beginning or end of year...not spread out. … I believe that the four-day work week is hard for little kids. I am worried that there will be costs down the road. Too bad...I like the four-day week”.

Parent: “Keep all school weeks to four days. It's gets a bit confusing with some weeks Monday to Thursday and some Tuesday to Friday”.

Employee: “I would like to see the weekends the same length even with a holiday Monday. (Schools open the preceding Friday rather than the following Friday)”.

Parent: “ I hope that the school district would return to a five-day week to allow students to [narrow] the learning gaps caused by the extra day off”.

Employee: “Return to a 5-day week for a better education for the students. They can only learn so much each day, and right now they are missing 1 day of learning every week”.

Parent: “I most wish for more commitment on the part of the district school board/administration and teachers to student centred learning by returning to the 5-day school week”.

Parent: “I do believe that a 5-day school day is what is best for the children. I also understand that financially a 4-day school week works better for the teachers, as there isn't such a need for [teachers on call]. Maybe the teachers should have a choice to job share – then the burn out rate wouldn't be so high and there would be a lot less sick days taken”.

Parent: “A return to a five-day week and a sustained and valid process of assessment”.

Student: “I came to this district from a private school, and the education in this district disgusts me. A five-day school week would make all the difference. Don't take the votes. Take

logic into consideration. Parents and guardians are saying that four days should remain because they like to have family time! THEY HAVE IT ON THE WEEKEND. Success for today's youth depends completely on EDUCATION; PROPER EDUCATION. And I believe that I deserve a chance when I get to places like UBC. And I'd like to think that all I'd have to do is my best at school to do well when I move on to University, but not the way things are going. I honestly pity myself because I am forced to be a part of this district. If you've made it reading this far; thank you for your time".

Parent: "I will never allow my kids to go 5-days a week even if it is [re] instated, unless my kids beg to go the 5th day. The 5th day is family time and that is incredibly important to us and our well-being!"

The School Year

Student: "I honestly wish for the school year to stay exactly the same. I believe that all of the students and anyone connected to children in the school would agree that most of us have created our lives in school upon having Fridays off. That is our day that we schedule appointments and such and I believe that we should definitely keep this day as a non-school day".

Parent: "When my family moved here 5 years ago we feel we [fell] into an ideal world. We get enough curricular time, time for extra curricular activities (both of my kids are very active in sports and music on Fridays and Saturday) and time for family as well. … I feel very fortunate that we get so much time together while getting a really great education for our kids".

Parent: "I hope that our school year (learning & vacations) reflect what other schools in BC are doing. Having the classic holidays & vacations are an important part of our life on Salt Spring, as we live away from our extended families (as so many islanders do), & always see our families during breaks. Any changes would result in a higher rate of absenteeism for us".

Employee: "I hope the district does not change the structure of the school year. Summer on the Gulf Islands changes dramatically in population and feel. I don't want my children having to attend school during this time".

Parent: "The amount that students have to learn is much greater than in the past and shortening the school year doesn't allow the students to keep up with students in other areas".

Employee: "Changing the 5th day in June. There is no reason that elementary students should need to go 5 days on the last week in June just because the high school students have exams. That 5th day is useless to elementary schools. That 5th day could be in May or earlier June.

Employee: "I believe that one week for spring break is enough. This extra week could help get rid of the few 5-day weeks we have. As a teacher I find lots of students never show up on Friday as they have other activities planned for Fridays".

Employee: "Making sure that there was always a two-week break for the students in the spring so that they can get recharged for the last chunk of the school year".

Student: "I would change the flexibility around Christmas, and yes I realize it is luxury and not for the direct purpose of learning. But when we go to Mexico for Christmas, we camp for almost 2 months in Baja and I learn so much, maybe not math but I believe that learning is not about paper and pencil, but more about experiences, in every situation. When I go to Mexico I learn about culture, new languages, new foods, new sports, cooking, coping with new environments, communication, and to have fresh air and play. And to me those are the most important lessons. The most important thing is I become so much closer to my family. But now that I am in high school, it is the first years in a very long time that I have not been able to go, due to the dance performance so near and, of course, Exams".

Parent: "I find too much academic crunch in the second half of the school year, I'd like to see more balance. I'd like to see more flexibility in the primary and middle school years in terms of student directed learning and following a model tailored to the child's needs not parents or teachers".

Parent: "Rearrange the schedule so there is not such a huge length of time until the first vacation. Shorten the summer vacation by 1 week and have a week of vacation time in November".

Parent: "Reducing summer holidays to one month and re-distributing the other month throughout the year".

Parent: "My sister teaches in Ontario in an alternate school year much like the one in Britain. It seems to make more sense for many reasons. The shorter summer break means starting back to classes takes shorter time to get the students back in a learning mode. There are other opportunities for families for vacations at other times of the year. As a teacher she is not as exhausted by the end of June because of the pacing of the school year".

Student: "More frequent breaks, though without sacrificing one longer break in the summer".

Student: "Slightly shorter summer holiday for example: School starting a week before September starts".

Parent: "The current 4-day model has worked well for my family, so I would like to see this continue. I recognize that there is an interest for other models of the school year (i.e. 12 month system), which might work for other families, so I would support different options. I do think it's important for children, parents/guardians and teachers to have an extended break (i.e. summer holidays) to explore other activities and relax".

Employee: "That we ensure a balanced calendar that supports student learning and maintains programs and staffing – adopting a calendar that would have a negative financial impact on the district would be detrimental to all".

Employee: "A school year/week/day that is organized around student learning needs, which may not all be the same".

Employee: "Changes could be made to the school calendar year to make more balance between vacations/holidays and school time".

Employee: “Decrease summer vacation by one week and add it onto another break or create another 1 week break during the year".

Employee: “Keep summer vacations and holiday breaks mostly the way they have been”.

Employee: “I wish for the continuation of the long March Break. It is very helpful because it allows for a rest: from March break to the end of the year is a real push!!”

Parent: “Consideration of how the "spring break" could be connected to the Easter holiday, so less interruption of it being two breaks – one break instead”.

Employee: “I think a shorter summer break and another break/s throughout the school calendar year may serve students better".

Organizing Time for Learning

Parent: “It would be that the time is organized to allow a more efficient use of student learning time”.

Parent: “The school MUST learn to organize teaching and learning time more effectively. The current method is NOT WORKING and must be addressed”.

Parent: “The teaching could be a bit more structured by grade 3 - 5. The students need to learn how to focus so they are prepared better for middle school”.

Parent: “"Having fewer students per teacher per hour.... maximizing student time in contact with teacher & smaller cohort of peers would be ideal. That could reduce the actual # of hours with an instructor – involve larger cohort of students with supervising research, reading, tutoring, etc. Younger students can also be taught this way + being in multi-aged groupings would allow for peer tutoring, and guidance. Essential to this kind of concept is that all these skills must be gradually introduced and TAUGHT... students not just told to 'fly at it’ !!"

Parent: “Learning time needs to be structured where kids are not sitting for hours at a time…. if they are, they stop learning. It's a two-fold problem. One is to have longer periods of learning but second, make the learning where they are moving and not being lectured to. (This is primarily directed at the high school and middle school levels, but applies to all grades)”.

Student: “Accelerated learning (i.e., smaller classes and more fast-paced environments for those who are able) because throughout my life at school I have found I am terribly under-stimulated by the school environment with its large classes and slowly paced out programs, where the stragglers slow everyone down”.

Parent: “More opportunities for children to explore the outside world through other adults coming in and enriching [the students’] lives from their points of view”.

Student: “I would like to see more personalized learning and more one-on-one time with teachers. If there's a way to provide time to work with teachers individually instead of in a

group environment. I think kids would benefit from a time period where you can work with a teacher on things you need help with the most".

Student: "… more time for inquiry, more time to learn about things you are interested in, a less stressful environment for learning. The way we are structured right now really perpetrates the way we are assessed at the moment. In the way that, at the end of the semester comes the end of that particular education endeavour and you get a mark on where you ended up, not how far you progressed. The time frame for each course is the same – not all courses take the same amount of time to complete and some take more time for some students. There is a lot of work to be done…"

Student: "I want to be able to only have to attend the classes I need for my desired schooling for the career I want.... so if I were to be a welder, I would take only the classes Camosun required plus the ones I want. Same with nursing or being a lawyer. Any career.... only required classes…"

Student: "I would hope that students like me, who do "all right" (or even well!) in the current school environment, would be able to do much better with this notion of reduced class sizes or more "structured" independent learning courses. That teachers will be more willing and supportive to help students learn how/at their own pace. And be more understanding about how students have personal lives and have to deal with that and health issues as well, and that health comes before school".

Secondary Student: "I would hope that the Work Zone system problem would be alleviated, because as I see it now, there are far too many students not making good use of their time, students still skip, and it is just not as efficient as the tutorial system, where a student could go to their teacher in a specific subject and go and get help! This system means that there are only a few teachers available at the time, and with my Work Zone, there is no way I can get any assistance from a teacher in any of my classes, because the other teachers who have a Work Zone in that block are not teachers in that [subject] area! I think the Work Zone system is certainly no better than the tutorial system (as its apparent goal of cutting down on skippers doesn't seem very effective), and is probably much worse. Bring tutorials back, that way you can meet with any teacher or students to work on things, which is a problem with Work Zone".

Employee: "Finding a more regular time for community members to come to school to meet with students. The current rotating block system is confusing for many community members coming into school and in some cases prohibitive. Perhaps something between the earlier tutorial system and the current "work zone".

Employee: " I have learned how to maximize time and definitely feel that students get enough instruction and learning time".

Employee: "Time, built into the timetable, that allows teachers to collaborate in meaningful ways with each other. For students, I would want them to have more time to meet in small groups and with their teachers one-on-one. This would mean an entirely different timetable that may, or may not, impact the "edges" of the school day or school year as they currently stand".

Parent: “We are satisfied with how school time is organized. We strongly feel that the teachers are not giving the kids the time needed to grasp concepts, as they are pressing to meet the curriculum requirements. The result is kids who are taught a concept, given a workbook and told to figure it out, doing poorly on tests. Taking the time to teach the kids is the best way to ensure the best outcome”.

Parent: “I have noticed over the years that more time is going to non-academics ... It used to be that there were few interruptions to classroom routines ... now there are far more and I wonder how teachers get everything taught in the allotted time”.

Employee: “Students have far too many legitimate reasons to be absent. … We just no longer value quality time with our classes and the result is a lower expectation of performance in class”.

Parent: “Most definitely, the time frame the students attend classes. I think it is important to instill in our children, the ideals of WORK. Unfortunately, in our current society, we have made the next generation, kind of lazy. One should have to learn about getting up early and get going, whether it's for school or employment. I think the requirement to apply ourselves, in whatever we do, can only improve our chances of being successful”.

Employee: “The opportunity to meet with parents, etc. outside of school time instead of having to call in a [Teacher On Call] to cover consultation time. This interrupts the relationships and flow of the class”.

Flexibility

Parent: “Status quo except more flexibility where required to enhance the learning of older students”.

Employee: Eliminate the "schedule" in all ways – blocks, days, weeks, year. Design a flexible system that allows for student learning to happen when and where it makes sense”.

Employee: “Drop the fixed bell schedule and go with a more flexible hybrid learning model”.

Student: “Make school time more FLEXIBLE to my irregular sleeping patterns sleeping schedule (seeing as I am a developing adolescent that has a very hard time getting enough sleep!!)”.

Employee: “Get rid of traditional classes on ridged schedules and make learning more flexible and adaptable to the needs of the student. No more bells ringing to tell us when we are finished thinking about one problem and need to start thinking about something else”.

Employee: “Less rigid scheduling of recesses and lunches to allow students that are highly engaged an opportunity to work uninterrupted”.

Parent: "I wish that the organization of the school day could be flexible and allow real differences, when necessary, to suit different learning and teaching styles and ideas”.

Employee: “Maintain the momentum that has been created towards flexibility in the timetable”.

Employee: "More flexibility district-wide so that families could choose between a 4-day and a 5-day week, start and end times, and year-long schooling”.

Employee: “The scheduling of music, gym etc. to be more flexible, so when students are engaged in something, we don't have to stop because it is time for music, gym, whatever. Very frustrating to be part of a big machine that does not allow for spontaneity”.

Employee: “More flexible time frames where the teacher has more autonomy. When we pass kids out for Numeracy groups, Literacy groups, Exploratories, French and Art, there is only a few chunks of time when I have the flexibility to work with all the kids for an extended period”.

Employee: “I would like to see more flexible arrangements in schools so that more teachers could do co-teaching of classes….”.

Student: "To have one day a week (or something of the sort) that is considered a flex day, a day where teachers are in school but there is no regulated schedule and you can get work done on whatever you needed for as long as you needed. This would help to keep some students (like myself) productive but not stressed, and to provide some teacher support you might not be able to get otherwise”.

Parent: “That Windsor House's flexible model will be preserved and supported. Its not perfect for everyone but is far, far better than other more restrictive models we've seen/experienced”.

Student: “I think students with "special" hobbies or time consuming extracurricular activities should have the option of creating a more flexible time table where the students can still get all the help they need and the courses as well as be able to do what they love. Me being a horse owner and avid rider and competitor that pays for their shows, it is very difficult to get everything done. When I get to the barn after school it is dark, I have maybe ten minutes to change, find an available wheelbarrow and muck before it is too dark to see then I ride and I don't get home till about 6 or 7 and then I do home work and I am in bed at 9 or 10 if I am lucky. I know I chose this life style and I make do, but it would be really helpful if the school system could be flexible around my very busy schedule”.

Student: “… the schedule should definitely be more flexible. I know this is hard with some students, as they need the structure to keep them in class, but there are so many kids who go to sports off island or, like me, I am just trying to juggle so many things with so little time, because I have to be at school for 7 hours 4 days a week. I think it would be helpful for these students if they could get all their work they needed to complete that day, week, or month and stay in school and do it with help, or go home and do it and get questions answered the next day in school. This creates an environment where students can do everything they want to do in their youth and still do well at school”.

Senior Student: “Well, I'll most likely be graduated by then...but I'm hoping that the schedule can become a tad more flexible for the kids to come. Being able to receive work from the school and being able to work more at home….”.

Work Zones at GISS

The topic of GISS Work Zones received considerable comment from students in particular. The over-whelming majority of these spoke against maintaining Work Zones in their current form, and a number advocated for a return to the “tutorial” approach followed in the recent past. Four responses are shared below, because they point to what may be a structural or organizational shortcoming, one that the students say negatively impacts their learning.

Student: "I have tough courses this semester and lots of homework. During my Work Zone, the teachers that can help me with my homework are teaching other courses and unavailable to help me. A free period for everyone, where we could go round to the teachers that can help, would be really useful for me”.

Student: “Having the tutorials back. I liked being able to go to whatever classroom, and get help on the things I needed help with. Especially now that I am in grade 12, and am taking many classes online, not through the school. The teachers in the Shift Room can only know so much about each subject. Students need access to the teacher who teaches that subject. The Work Zone blocks do not work. I have … heard many people say that they slack off more because they don’t have access to the teacher they need”.

Employee: “Work Zones are highly ineffective in their current state, and have been so for many years. We have not yet realized the concept, nor been successful in allowing for student choice...students are not optimizing their time”.

Parent: “Being a family with kids in the Outer Islands, it is an 11 hour day from door to door; I wonder if the 'free' [GISS Work Zone] block is of actual use, or if it is just filler, my daughter takes only 4 classes plus the free block, and between recess, reading & lunch breaks, I wonder if the free block can be eliminated and shorten the door to door time to 10 hours, allowing actual time for sleep”.

Greater detail regarding responses is available for sharing with the GISS admin team.

Outer Islands Students

Student: “Making more opportunities available to the outer island students, so they can actually attend them”.

Employee: “What about the problem that outer island kids don't get to SIMS on time due to the water taxi arrival – school start time clash? That's gotta make outer island kids feel like second class citizens!"

Student: “…. more flexible for the Outer Gulf Islands, such as getting more work so you wouldn't need to come to school if you weren't feeling well or if you decided to sleep in”.

Parent: “That the 9-12 students from the Outer Islands have more options and flexibility to work independently from home, if it works for them. If the weather is bad and the water taxi is not running they have work they can do at home with out missing anything that was in the classroom. More communications with the teachers through computers”.

Parent: “Increased emphasis on attendance at student centres to allow outer island students the flexibility of a no-travel day which nevertheless allows a study schedule and contact with GISS teachers”.

Part Three: Findings

To what degree does the organization of time (e.g. length of day, days in week, length of breaks) in School District No.64 affect educational outcomes?"

TABLE OF CONTENTS

Part Three: Findings

This section summarizes and synthesizes literature review, survey, and focus interview findings.

Literature Review Findings

Overall, the literature reviewed suggests that the quality of the time devoted to teaching and learning matters at least as much and perhaps more than the quantity of that time. Key review findings are summarized below:

- The standard school calendar 'is a twentieth century urban invention' (Fischel, 2003); it evolved over time, in response to the growing need, in an increasingly urban context, for cross-community coordination, not because it represents educational best practice. Where the agrarian response was largely concerned with local conditions, the urban one became more broadly concerned with coordination between and amongst localities and regions, giving rise to and benefitting from network effects. Some degree of calendar standardization and coordination is necessary.

- "Experimental studies have repeatedly found no correlation between time spent at school and levels of achievement." (Bickford and Silvernail, 2009; Baines, 2007; Fisher and Berliner, 1985). Scholarly evidence from empirical research showing a positive relationship between additional classroom time and higher standardized test scored is "relatively thin". (Jez and Wassmer (2011)

- As "there is no statistical relationship between the length of time a school is in session and student performance" (Van Beek, 2009), "simply adding hours to the school calendar does not increase academic performance" (Stoops, 2007), and devoting more time to a particular subject does not translate directly into improved student achievement. (Copple, 1992)

- The strength of the relationship between time and student achievement is seen to vary with the unit of time considered. While there is a "modest but persistent association between years spent in school and achievement", little or no association exists between the number of days spent learning and the achievement shown. Time devoted to school learning appears to be a modest indicator of achievement. (Frederick and Walberg, 1980). There is "no significant connection between the length of the school year and student achievement". (Bickford and Silvernail, 2009)

- There are many in-school and out-of-school factors that affect student achievement. The SSTA (1999); Adelman, 1996; Mazzarella, 1984; Ellis, 1984; Rossmiller, 1983; Karweit, 1982) and to estimate more precisely the effects of other educational variables such as the quality of instruction on student achievement, controlled studies are needed. (Frederick and Walberg, 1980)

- The amount of time for learning, whether increased or reduced, does impact disadvantaged students. (Pultke, 2002)

- As learning is a function of the ratio of time needed *for* learning and time spent *in* learning (Gettinger, 1984), efforts to maximize time spent in learning are key to student achievement. (O'Brien, 2006; Walberg, 1998; and Aronson et al., 2005)

- A positive relationship between time and student achievement is seen variously as "tentative" (Patel et al., 2009), and "significant when combined with good teaching and effective school and student management". (Leiseth, 2008)

- Thoughtful use of instructional time is a key factor in student success (Marzano, 2003; Chenoweth, 2007), particularly when "supported by strategic teacher professional development". (Rowe and Rowe, 2002)

- People want the school calendar to fit, so as to serve, their lifestyle. (Schell and Penner, 1993; Perry, 1991)

- When calendar changes do occur, they tend to come either as a direct response to "an overpowering need to change, which left little alternative" or as a result of "carefully planned and executed processes for involving the community" in the decision-making. (Schell and Penner, 1993)

- "Despite over 35 years of implementation, few studies have documented the impact of the four-day school week". (Donis-Keller and Silvernail, 2009; Darden, 2008; Klump, 2013). "Much of the literature on the practice concludes that a condensed schedule may have a positive effect, and in most cases has no negative impact". (Donis-Keller and Silvernail, 2009, citing others). Achievement gains were demonstrated in some districts following a four-day schedule, and that these "are connected to the quality of instructional time, not the four-day schedule". (Miller Hale, 2007)

- Redistribution of learning time in the context of year-round or balanced calendar approaches isn't in and of itself enough to mitigate learning loss; "to truly see a difference, schools would have to increase the number of instructional days; currently most year-round schools simply redistribute the roughly 190 days of school all children attend". (Von Hippell, 2007)

- Research proposing the benefits of a balanced calendar is similarly limited and finds positive effects, no effects, and negative effects on student achievement.

The literature reviewed shows that the relationship between instructional time and student achievement is far more complex than it appears at first glance. While learning is a function of time the evidence suggests that time is, at best, a modest predictor of achievement. The evidence, however, must be interpreted in the context of "all that other stuff" – the many variables that come into play with that relationship. (Klump, 2013)

With respect to four-day week approaches, in particular, the most common means of identifying success or failure are typically reports or evaluations conducted by districts themselves, and their findings do not necessarily transfer to different contexts. Limited

research shows the four-day week approach to be, at the very least, a case of 'little or no harm done'; however, care must be taken in assuming that conclusions arrived at in one context are directly transferable to other contexts. Klump and others have shown that without controlling for the many variables that interplay with school learning time and student achievement it is "*impossible to know if apparent changes in achievement are a result of the schedule change or other factors".*

The literature reviewed suggests, strongly, that 'summer learning loss' or 'summer slide' is real and that it occurs over any long school intercession, particularly the two-month summer vacation. It further suggests that it may be more a symptom of another problem than the problem itself; that problem being our over-reliance upon standardized measures that test for 'intellectually less ambitious' learning's that lend themselves to being forgotten. This preoccupation with the learning loss as demonstrated through standardized testing, may be distracting us from what is, ultimately, a bigger and more pressing challenge.

School Calendar Considerations and System Purpose

Consistent with the conclusions of Schell and Penner (1993), a significant number of survey respondents spoke of their preference for a four-day week approach, saying that because they have adjusted to it and it 'fits' with their lifestyle and works for their families, they would like to see it continued. While, for the most part, they believe others have similarly adjusted, they also express concern that families with vulnerable children, and those children, might be struggling.

That the school calendar is seen to 'fit' with the 'lifestyle' of the families served is a good thing, but it isn't the main thing. As observed by several participants, and as the Board knows, student academic achievement is the main thing and lifestyle fit is a happy side benefit. One interviewee, commenting on 'fit' and the societal factors that drive the way school time is configured, offers this advice, "Avoid the hard to ignore economic pressure to formulate school according to a work week. It's easier on the family, but we have to release school from the day care model. If we don't bend to that pressure, that will be the beginning".

The following interviewee comment points to the fact that, in the end, school calendar decisions must be made on the basis of student learning and achievement, and the quality of instruction and learning:

> "I'd be really interested in seeing research on how kids are doing after 8 years into the four-day week. If they're doing fine, then keep things the way it is; if there are educational reasons to go back to a five-day week, or another model, then they should do it. Kids may be putting in the same amount of time as a five-day week, but I feel like, at the end of some days, some of the kids are just bodies in the room. The quality just isn't the same."

This speaks directly to the research question and echoes observations to that effect, made following the April 2012 Board meeting discussed earlier. It underscores the importance of basing school calendar decisions on student achievement data which, while they will give some idea of how students are doing over time, won't tell you why. Nor will they tell you whether or not performance is attributable to the way time is organized.

Challenges Associated with the Research Question

A major challenge associated with the research question was noted by several focus interviewees, one of whom observed, "You can't answer the [research] question. The context in which the comparisons are made always changes, and that has to acknowledged somewhere."

With respect to the survey responses, it must be acknowledged that most responses (approximately 85% in all respondent categories) came from Salt Spring Island; thus, the data upon which conclusions and recommendations are, in part, made is predominantly Salt Spring based and should be considered with that in mind.

The research question, written broadly, situates, or embeds, two narrower and persistent questions in a broader context that takes school calendar discussions beyond the realm of the simple either-or ('four-day or five-day?) proposition that is, in the minds of many, the crux of the issue.

The comments of several focus interviewees both speak to and help frame these embedded questions:

> Interviewee: "Remember that when the four-day school was introduced it was primarily implemented because of the fiscal shortfall and not for educational reasons."
>
> Interviewee: "Have we actually made those savings? The reason for doing a four-day week was that we would go bankrupt of we didn't, not because it was an educationally sound thing to do. Have we kept the programs we went to the four-day week to preserve?"
>
> Interviewee: "Most schools are over-spending a massive amount of their flex time on teacher sick time. We were meant to have savings in that, but we haven't, we've had increased spending in that. We're now spending a massive amount of money on teacher sick time, and the move to the four-day week was meant to reduce that. We need to look at why that is. Does having to work a longer day, working a longer four-day, the reduction in resources and support, the larger numbers at the intermediate level, the promise of decreased primary class sizes that never occurred, the lack of balance in the way time is distributed [give rise to increased sick time]?"

The two persistent questions, essentially paraphrases of interviewee questions, are as follows:

"After eight years of following a four-day week calendar, how do we know what impact this has had upon student achievement?" and

"Do the financial considerations in response to which the district felt compelled to move to a four-day week still exist; if not, then why are we continuing with it?"

With respect to the first 'embedded' question, the answer is, as participants observe and the literature leads the researcher to conclude, that student achievement data tells us how students are doing, more or less, but not whether, in what ways and to what extent, their

achievement is affected by the way time is organized. More specifically, it doesn't tell us whether their performance can be directly attributed to the number of days in their school week. As an interviewee observes,

> "You can't compare the way our students were served under a five-day week with the way they're served under a four-day week. It's apples and oranges because of the variables that have come into play. The context in which the comparison would be made has changed so much. It's not about four-day, five-day, it's about all that other stuff. If all that stuff had stayed constant, we could make a fair comparison between four-day and five-day."

Although the second 'embedded' question lies, for the most part, beyond the purview of this study, the researcher notes relationships between the way the district is financed, the way it allocates its resources, the way time is organized, and educational outcomes. District finances are a complicated matter, particularly as the financial conditions that apply in any one year cannot be taken in isolation of the years preceding and following, and without taking into account the possible financial effects that periodic changes in provincial government can be expected to have at the local level. Consequently, it is difficult for senior district administrators to determine whether or not a relatively healthy financial picture in any one year would warrant a return to a five-day week calendar in the following year, and whether the increased costs associated with the change can be met in that and following years.

The problematic nature of time, as it figures in the question and drives the way educators and students approach their work, is expressed by an interviewee, who describes a fundamental problem and offers a possible solution:

> "You always hear that there's not enough time, I'm not getting this done, I feel I'm not meeting all the requirements. It's a pretty common theme. Time is a perspective thing – the more you have the more you need. …. Don't be rigid with the expectation of how much time students need to learn a subject. Stop looking at minutes in a day. Look at what students need to learn, and think about how we're going to achieve that. It comes down to quality of time, where instruction is concerned."

The literature suggests, as does this interviewee, that concern for the amount of time devoted to learning might be better directed at ensuring that the time available is put to effective and efficient use, such that it becomes 'quality' time. However true it may be, though, that time used wisely and well, in whatever quantity, can be an academic equalizer, it is also true that those feeling over-burdened due to a perceived lack of time will be challenged to use that time wisely and well. Calls for both more time, and better use of time, lie at the heart of the problem being considered, and the challenge faced by the Board involves somehow satisfying both.

An email responder suggesting that, perhaps, we're asking the wrong question altogether wonders "….if there's any way for you to discern whether our SD64 kids are more interesting than students in other school districts, because ours have another day per week to pursue other interests and passions."

Student Achievement and Accountability

While it has been said that, "the Board does not have any robust evidence either way" regarding impacts of the four-day week calendar upon educational outcomes, it can also be said that the Board has, for the past eight years, diligently gathered and thoughtfully analyzed student achievement data, and reported to both the Minister and the public it serves. Its documents, available both on-line and through the School Board Office, detail on-going efforts to be accountable to the Ministry of Education and the public it serves, by adhering to this process in a consultative and collaborative way.

The BC Ministry of Education reports student demographics and academic achievement in the K-12 education system. A review of four on-line Ministry documents offers information regarding the achievement of BC students, and of this school district's student achievement relative to the achievement of their provincial, national and international counterparts:

- The Programme for International Student Assessment (PISA) is administered every three years to 15 year olds. In 2006, when proficiency in Science was the focus, BC students compared favourably with both their Canadian counterparts and students in OECD nations: 72.4% of BC students attained proficiency Levels 3-6 on the six point scale; Canadian students 71.1%; and OECD students 56.8%

- The Progress in International Reading Literacy Study (PIRLS) is administered every five years. On the 2006 assessment, 88% of BC students attained Intermediate, High or Advanced levels) when 76% of student counterparts in other countries attained 76%.

- The Ministry of Education notes that, "The many changes to FSA in 2008 mean that there is now a new benchmark against which results for future years will be measured." It advises against comparing district FSA results for the period 2001-2007 with those for the period 2008-2012 because of a 2008 change in when and how the instrument is administered, before presenting a graphic comparison that shows a generally downward trend in district results over the period 2001-2012.

- During the period 2007-2010 the average results of this district's Grade 4 students on the annual Foundation Skills Assessment, which assesses proficiency in Reading Writing and Numeracy were higher than those of their provincial counterparts. The same was true with respect to this district's Grade 7 students, except that their average score in Numeracy was 1% lower than their provincial counterparts. Year to year results are consistent over that time, and where district 'blips' occur, these are mirrored at the provincial level, suggesting an issue with the instrument rather than the students.

- In 2009-2010, the district's Grade 10 average provincial pass rate (over 4 exams) was 92.3%, versus the provincial average rate of 93.7% (over 6 exams); its Grade 11 rate was 99.5% (over 2 exams), versus a provincial rate of 96.7% (over 3 exams); and its Grade 12 average rate was 99.5% (over two exams) versus the provincial average rate of 97% (over three exams). In this district, as a size effect, not all exams are written every year, they're 'cycled'.

- During the period 2005-2010 an average of 61.7% of this district's students, parents and staff expressed greater satisfaction with learning outcomes 'all the time' or 'most of the time', than did the same stakeholder groups in BC public schools, who expressed 58.14% satisfaction over the same period. (This should not be taken to mean that district stakeholders are more satisfied with results following a four-day week approach, than their provincial counterparts are, following a five-day week approach.)

The Fraser Institute's annual reports on the performance of BC secondary schools, though controversial, are given serious consideration by parents of international students looking to enroll their children in BC secondary schools. These show GISS's steadily declining rating and ranking over the period 2007-2012; from 6.0 in 2007 to 5.2 in 2011; an average ranking over that period of 141/261; and a 2010-2011 ranking of 204/280.

Data related to student achievement in this district is subject to the statistical 'ups and downs' that occur, annually, as a result of an interplay of factors. These include size effects, government policy changes; the sometimes flawed and misleading way that the Ministry analyses and presents data for district consideration; year-to-year changes to the district's financial picture as they impact staffing and other resourcing; changes to format and delivery of the standardized instruments used to gather the data (for example, the 2008 FSA), the changes and challenges associated with student and staff demographics, and many other variables discussed in Appendix Four. Although the data appears "robust" enough and suggests that, over time, district students have met or exceeded learning expectations in key academic areas, it must be seen and understood in this light.

The school district has been subject to external review twice in the past decade: once in the 2002-2003, just prior to adoption of the four-day week approach to organization of school time and, again, in 2005-2006, during the second year of it's implementation. The latter review, conducted by a panel of six, representing parents, teachers, school and district administrators, and the Ministry of Education, determined that, in all ten key areas of school district operation, this district was either "meeting expectations" or "sustaining improvement". Fourteen areas of strength and promising practice were identified. Overall, this document suggests that the district successfully transitioned out of a five-day week approach, into a four-day week approach.

Achievement contracts represent an iterative process by which districts gather and analyze student performance data, set goals to improve student outcomes, implement strategies to achieve those goals, review their progress and revise, as necessary.

The 2007-2008 Achievement Contract provides a broad, graphic overview of Foundation Skills Assessment results for the periods of Spring 2001 through Spring 2006. Developed by teachers and mandated by the Ministry, this assessment tool is generally regarded by the teachers' union as a poor indication of students' performance. The overview shows the number of Grade 4 and 7 students meeting or exceeding expectations in key academic areas, over a five-year period, in the range of 75-85%. It notes year-to-year increases and decreases that "look minimal". The Superintendent explains that these results, when item-level responses are analyzed and compared with similar item-level responses in other district measures, the results

are “strongly correlated”. There is very little in the graphs as presented, to suggest either sustained decline or sustained improvement; overall, they show results sustained over time.

The “Superintendent’s Report on Student Success: December, 2009” notes challenging areas of Student Achievement, particularly where Numeracy (Math) is concerned, and sets a goal and objectives to effect improvements. As well, the Superintendent notes increases in the number of Grade 1-9 students meeting or exceeding expectations, according to BC performance Standards, in reading comprehension, and in the “meaning” aspect of writing.

Also noted are challenges associated with analysis of senior students’ secondary exam scores, because year-to-year policy changes make for ‘apples to oranges’ comparisons. The document identifies “some notable limitations” in Ministry of Education – provided secondary data, and provides data adjusted for International Program student in-out migration, to show that over the period 2005/06 -2008/09, actual high school completion rates were rising: 89% in 2005/06; 91% in 2006/07; 91% in 2007/08; and 94% in 2008/09.

The document “District Commitment to Learning, School District No. 64 (Gulf Islands: 2010-2011” overviews the district response, over time, to the Spring 2006 External Review and outlines the district’s efforts to ‘maximize stakeholder input’ through its March 2010 Board-hosted retreat and its May 2010 district planning. It tracks progress towards past achievement targets. As well, it details changes in reading comprehension levels of 35 randomly-selected individual students over the period 2008/09 through 2009/10. On a four-point scale measuring comprehension, the whole group score is shown to have risen from 3.09 to 3.26. While 3 students are shown to have dropped from level 4 to level 3 and 22 students are shown to have maintained the same level, the overall number of students shown to meet or exceed expectations rose from 28/35 to 33/35.

In the 2011-2012 Achievement Contract, the Superintendent explains that this annual accountability process has “begun to make greater use of qualitative data, as part of an overall appreciative inquiry process.” The limitations inherent in small district quantitative data notwithstanding the Superintendent continues, as required, to gather and analyze student achievement data in order to inform the district’s on-going and consultative process of goal-setting and goal review. This is done in support of “the pattern of success this district has come to enjoy”.

While this data shows how students have performed in those years when a four-day week approach has been in effect, it doesn’t say whether outcomes are attributable to that approach. In order to make that determination, it would have been necessary, along the way, to isolate the four-day week approach and student learning outcomes from other variables at play, and study their interplay, as suggested by Klump (2013) and others.

Survey Findings By Group

Survey respondents were able to respond to more than one item within a given question, in the interest of recognizing that, for many if not all of them, responses must go beyond selection of one consideration over another, in an either/or way, to better reflect the ‘shades of grey’, ‘it depends’ complexity of their experience. Consequently, the total number of responses exceeds the number of respondents in some cases.

Elementary Students' Surveys

The data show similar response patterns on the parts of Outer Islands and Salt Spring Island elementary students. The majority of students (65.8%) would prefer to see their school days "stay the same"; 24.7% would like a shorter day; and 5.3% would like a longer one.

Most students (71%), when asked to think about whether they have enough time to eat and play during lunch and recess said that they do. The fact that 34.2% indicated that they don't have enough time to eat and play during lunch and recess is significant. It suggests this should receive further consideration at the school level, where daily schedules are set; and there should be further discussion between and amongst schools about what adjustments might be possible, recognizing that school schedules are driven to a considerable degree by shared transportation services.

A majority of elementary students (65.2%) think the school week "should stay four days". Approximately one quarter of students (24.2%) indicate that the school year "could sometimes have 4 days and sometimes have 5 days", and 10.2% said they would prefer a five-day week.

The response to the question concerning the length of the school year was somewhat surprising to the researcher, who expected the majority of students to say they would prefer a shorter school year. On the contrary, a majority (61%) said they wanted the school year length to "stay the same". A shorter school year was preferred by 33% of students, and 5.3% said they wanted a longer year.

The response to Question Seven was no surprise at all. Fully 50% of students said they preferred a longer summer holiday; 29.5% want the summer to "stay the same"; and 4.2% want a shorter summer holiday. "A shorter summer with longer holidays during the school year" would be okay with 20% of student respondents.

When students thought about their school learning time, 66% said they have "enough time to get [their] work done"; 12.6% said they don't have enough time to get their work done; and 37.4% said they'd like more time to get their work done. Most of those who say they don't have enough time, say they want more, as do many of those who said they have enough time.

A majority of students (71.5%) said that they aren't too tired to do other things when they get home from school; and 37.4% said they are too tired to do other things when they get home. Some students selected both responses and noted 'it depends on the day', thus accounting for the percentage total in excess of 100. The roughly 2:1 ratio of elementary students 'not too tired' to students 'too tired' warrants further consideration.

Amongst those students who indicated that they take schoolwork home, roughly half said that this work was "extra", as in the case of a project to be completed over time, and roughly half indicated that this was "work not finished in class". Results suggest that Outer islands students are assigned both kinds of homework to a greater extent than are Salt Spring Island students. This result should be considered against responses to the question about fatigue, which suggest that a significant number of students are "too tired to do other things" when they get home from school. The question about fatigue having preceded the one about

homework, it can be inferred that thoughts of homework did not influence responses to the fatigue question.

Grade 6-12 Students' Surveys

More students in Grades 6-12 (71/200; 36%) say that the school schedule organizes teaching and learning time well, than say it could be better organized (46/200; 23%). They agree, quite strongly, with the statement that there is enough time for teaching and learning (148/200; 74%), with a small number saying there isn't (18/200; 9%). Within this number, secondary students (16/200; 8%) figure more prominently than middle years students (2/200; 15).

Nearly half of the students strongly believe that the school day should stay the length that it is now (96/200; 48%), and that more flexibility should be built into it (97/200; 48.5%). Support for a shorter school day, while not great, exceeds that for a longer day by a factor of 3.

More students would like to see a longer lunch break (74/200; 37%) than say there is enough lunch time (55/200; 22.5%). More students say that there should be more recess time than say there is enough.

Students advocate strongly for continuation of the four–day week approach (163/200; 81.5%), with some advocating for a return to the five-day week (20/200; 10%). There is mild interest in a calendar involving weeks of different lengths (27/200; 13.55).

The variety of activities pursued by students on Fridays is illustrated by Question Nine, which identifies the most commonly pursued activities (in descending order) as: leisure activities, catching up on sleep, homework, activities in support of their families, and working at a paid job. Twenty-five students, including 4 at the middle years level, said they continued, in some way, with a school program.

Students indicated, strongly, that they preferred a traditional approach to the school year (147/200; 73.5%), and that they like vacation times as they are (134/200; 67%). Some interest in seeing a better balance between school time and vacation time was expressed (34/200; 17%).

Interest in seeing the district look most closely at ways of making better, more effective use of the learning time available was greater (93/200; 46.5%), than it was in seeing it differently organized and distributed (33/200; 16.5%) or increased (33/200; 16.55). The survey does not make it clear whether this increase would be to the overall amount of learning time, or the amount of meaningful, on-task activity within that.

More detailed responses were made by way of the "Other" option associated with Questions 5-11 and 12, by way of Questions 13 and 14, and by way of focus group interviews.

District Employees' Surveys

While the ratio of GITA respondents to CUPE responses was essentially 2:1, it should be appreciated that the 15 "Other" employees, being CUPE or GITA members, impact upon this ratio. Most responses came from staff at GISS, SIMS and Salt Spring Island elementary schools.

Generally speaking, teachers say that, while there isn't enough time available for teaching and learning, interruptions to teaching and learning are kept to a minimum. Support staffs express proportionately more concern about interruptions than teachers. Employees are essentially split with respect to the question of whether or not schools organize teaching and learning time well. Support workers are proportionately more inclined to say that schools do organize teaching and learning time well than teachers.

A significant number of employees (42/78; 54%) prefer to see the school day stay the same length as it is now, but would like to see a more flexible day. Employees are much more inclined to say there is enough recess, lunch and transition time, than there isn't. Support for a four-day week and support for a five-day week occur in a ratio of nearly 3:1 (45/78: 16/78). While there is some interest expressed in school weeks of different lengths (some 4-day and some five-day), this is not strong (12/78; 15.4%). Employees are more inclined to say that teaching and learning are not compromised by compression of five days into four (32/78; 41%), than they are that is (14/78; 18%).

Fridays are generally regarded as days offering benefits to students and staff; 54/78 (69%) of employees see student benefits and 58/78 (74%) see Fridays giving rise to a three-day weekend that affords greater balance between work and personal lives. Employees acknowledge that Fridays may cause difficulty for some families (22/78; 28%) and do not see the longer weekend as giving rise to a learning gap (10/78; 13%).

Employees express strongest support for a 'traditional' school year (46/78; 59%), whilst indicating that they'd like to see better balance between school time and vacation time (30/78; 39%). There wasn't strong support for the idea of either an earlier school start date (4/78; 5%) or a later end date (6/78; 8%). While more employees would like to see the vacation times as they are (35/78; 45%), some (8/78; 10%) would like to see vacation times changed. The idea of a shorter summer holiday with longer holidays elsewhere in the year was endorsed by 22/78 (28%). The idea that the summer vacation as currently configured offers benefits to students (47/78; 60%) and staff (45/78; 58%) was well supported.

The ideas of maintaining the amount of student learning time available, and of finding ways to make better, more effective use of it, were both well supported; 35/78 (45%) and 41/78 (53%).

Parents' and Community Members' Surveys

The ratio of parents to community members responding was approximately 8:1. Parent responses included 13 home stay parents of international students, and community responses included 1 recreational provider, 5 employers and a group of 15 that included at least one graduate, grandmother, health provider, parent-to-be, retired employee, and water taxi staff member. The majority responded from Salt Spring Island.

More respondents (84/204; 41%) say there is enough time for teaching and learning than say there isn't (52/204; 26%); and more (84/204; 41%) say that the school schedule organizes teaching and learning time well, than say it could do so more effectively (67/204; 33%). Concern that there are too many interruptions to teaching and learning was expressed

by more people (25/204; 12%), than was the belief that interruptions are kept to a minimum (19/204; 9%).

Amongst parent and community members there was strong interest in maintaining a school day the same length as it is now (107/204; 53%), in introducing greater flexibility into it (50/204; 25%), and in going to shorter school day (39/204; 19%). There was minimal support for the idea of a longer day.

While there was strong agreement that there is enough lunch time (110/204; 54%), enough recess time (90/204; 44%) and enough transition time between classes (57/204; 28%), there was significant agreement that there should be more lunch time (38/204; 19%) and more recess time (30/204; 15%).

Responses indicating support for a four-day week approach (112/204; 55%) as opposed to one involving a five-day week (71/204; 35%) are in an approximate ratio of 5:3. While half of respondents (102/204; 50%) say that they feel the community has adjusted well to students not being in school on Fridays, others recognize that Fridays may cause difficulty for some families (72/204; 35%) and that the three-day weekend represents a longer learning gap (64/204; 31%). Respondents see potential benefits accruing to students (103/204; 51%) and staff (78/204; 38%) as a result of Fridays not in session.

There is strong support (130/204; 64%) for a traditional September-June school year with a July-August summer holiday, and for a year with better balance between school time and vacation time (62/204; 30%). Support for either an earlier school start date (20/204; 10%) or a later end date (20/204; 10%) was not strongly expressed.

When asked to focus on summer vacation time, nearly half of respondents (95/204; 47%) said they like the vacation times as they are, and some (25/204; 12%) that they would like to see them changed. While nearly half (95/204; 47%) see the summer vacation as currently configured allowing students opportunities to pursue other interests including employment, roughly one quarter (45/204; 22%) think it's too long and results in a student learning gap. Presumably, with a mind to balance, roughly a quarter (50/204; 25%) would like to see a shorter summer and longer holidays elsewhere in the school year.

When asked to think about school year organization, parent and community respondents expressed strong support for the ideas of looking at ways of making better more effective use of the student learning time available (133/204; 65%), and different ways of organizing and distributing school and vacation time (60/204; 29%). Support for maintaining the amount of student learning time available (101/204; 50%) well exceeds that for either increasing or decreasing it.

Survey Cross-Comparison

In this section, responses submitted by different respondent groups are presented together, in the interest of demonstrating the relative emphases placed upon particular ideas.

Teaching and Learning Time

Participants were asked to respond to a number of statements concerning the amount of time available for teaching and learning. Responses within each group are shown as a percentage of the number of individuals within that group.

Elementary Responses

Elementary students were asked to think about their learning time. They responded to one or more statements, as follows:

Statement: "I have enough time to get my work done".

Response Group	Responses to this question as percentage
K-5 Students, Outer Islands (N= 79)	(55) 77.5%
K-5 Students, Salt Spring (N=111)	(71) 64.0%

Statement: "I don't have enough time to get my work done".

Response Group	Responses to this question as percentage
K-5 Students, Outer Islands (N= 79)	(13) 16.5%
K-5 Students, Salt Spring (N=111)	(11) 9.9%

Statement: "I'd like more time to get my work done".

Response Group	Responses to this question as percentage
K-5 Students, Outer Islands (N= 79)	(18) 34.0%
K-5 Students, Salt Spring (N=111)	(53) 47.7%

A majority of elementary students (126/190, or 66.3%) indicate that they have enough time to get their work done. A relatively small number of students (24/190, or 12.6%) indicated that they don't have enough time. A significant number of students (71/190, or 37.4%) indicated that they'd like more time to get their work done; these included both students who said they have enough time to get their work done, and those who said they did not. As students in a number of schools were responding to this question, the researcher heard numerous comments to the effect: "I like the work" and "It's fun" which might explain why some students who say they have enough time, would like more time.

Other Respondents

Students in Grade 6-12, district employees, and parents and community members were asked to ***'Think about the amount of time NOW available for teaching and learning"*** in the school with which they are most closely associated. They responded to six statements as follows, and added 'Other' comments as they wished. Responses are shown as a percentage relative to the number of respondent, not the total.

***Statement: "I think there is enough time for teaching and learning*".**

About half of respondents (254/482, or 52.7%) said, *"I think there is enough time for teaching and learning*". Students were much more inclined to agree with this statement than were other respondents.

Response Group		**Responses to this question as percentage**
Middle Years Students	(N=67)	(57) 85.1%
Secondary Students	(N=133)	(91) 68.4%
Parents	(N= 161)	(69) 42.9%
Community, incl. Other	(N=43)	(15) 34.9%
Employees, CUPE	(N= 19)	(5) 26.3%
Employees, Other	(N=15)	(3) 20.0%
Employees, GITA	(N=44)	(14) 31.8%

Respondents submitted "Other" comments as follows:

Two employees commented that, for them, time isn't the most important consideration. A GITA member commenting on learning at the secondary level said, *" the most important focus … is IF and HOW learning takes place, not WHEN".* In a similar vein, a CUPE member said that *"time is not the factor, class size and composition is".*

Student: *"I become bored because classes are too long".*

One parent observed that there is enough time for teaching and learning if time is used constructively. A community member expressed hope that, "time is being used to educate and not [for] glorified baby-sitting".

Parent: *"The day is too long for high school students".*

Student: *"Each curriculum has too much information; some teachers succeed in teaching [only] key components, therefore we have enough time".*

Statement: "I think there isn't enough time for teaching and learning".

100/482, or 20.7% of respondents said, "*I think there isn't enough time for teaching and learning".*

Response Group		**Responses to this question as percentage**
Middle Years Students	(N=67)	(2) 3.0%
Secondary Students	(N=133)	(16) 12.0%
Parents	(N= 161)	(47) 29.2%
Community, incl. Other	(N=43)	(5) 11.6%
Employees, CUPE	(N= 19)	(2) 10.5%
Employees, Other	(N=15)	(2) 13.3%
Employees, GITA	(N=44)	(26) 59.1%

"Other" responses included these:

Parent: *"It seems like teachers are sometimes scrambling to teach the curriculum required. Whether this was the case in the five-day week, I don't know".*

Student: *"I need more time to learn".*

Student: *"Too much time is spent doing irrelevant stuff; the time could be better used by students".*

Statement: "I think interruptions to classroom teaching and learning (for example, announcements and assemblies) are kept to a minimum".

90/482, or 18.7% of respondents said, *"I think interruptions to classroom teaching and learning (for example, announcements and assemblies) are kept to a minimum".*

Response Group		**Responses to this question as percentage**
Middle Years Students	(N=67)	(10) 14.9%
Secondary Students	(N=133)	(36) 27.1%
Parents	(N= 161)	(13) 8.1%
Community, incl. Other	(N=43)	(6) 14.0%
Employees, CUPE	(N= 19)	(6) 31.6%
Employees, Other	(N=15)	(2) 13.3%
Employees, GITA	(N=44)	(17) 38.6%

Statement: "There are too many interruptions to teaching and learning".

A relatively small number of respondents (43/482, or 8.9%) indicated they think that, *"There are too many interruptions to teaching and learning".*

Response Group		**Responses to this question as percentage**
Middle Years Students	(N=67)	(5) 7.5%
Secondary Students	(N=133)	(2) 1.5%
Parents	(N= 161)	(18) 11.2%
Community, incl. Other	(N=43)	(7) 16.3%
Employees, CUPE	(N= 19)	(2) 10.5%
Employees, Other	(N=15)	
Employees, GITA	(N=44)	(9) 20.5%

Several parents commented that they are not involved enough to be able to respond. Another observed that enrolment in the SEEC program resulted in 'fewer interruptions than there had been at SIMS.' One student offered that, "interruptions are mainly created by students, if we could change that…".

Statement: "I think the school schedule organizes teaching and learning time well".

Nearly a third of respondents (146/482, or 30.3%) said, *"I think the school schedule organizes teaching and learning time well".* CUPE employees and secondary students indicated the strongest agreement with this statement.

Response Group		**Responses to this question as percentage**
Middle Years Students	(N=67)	(17) 25.4%
Secondary Students	(N=133)	(54) 40.6%
Parents	(N= 161)	(43) 26.7%
Community, incl. Other	(N=43)	(7) 16.3%
Employees, CUPE	(N= 19)	(8) 42.1%
Employees, Other	(N=15)	(3) 20.0%
Employees, GITA	(N=44)	(14) 31.8%

One parent commented that, " the school schedule is well-organized to meet the needs of most students, but there needs to be more funding for support services" and another said, "My child tells me that his teacher is always busy with the 'special' children. This takes away from the needs of the rest of the class". Another parent suggested that, "a volunteer parent body be developed to assist teachers and bring in other areas of expertise."

A parent observed that, "the Secondary School Apprentice Program has offered direction and balance between work and school, especially for those at risk of not continuing."

Statement: "I think the school schedule could organize teaching and learning time more effectively".

Of those responding to this statement (138/482, or 28.6%), CUPE employees and community members said most strongly that, *"I think the school schedule could organize teaching and learning time more effectively".*

Response Group		**Responses to this question as percentage**
Middle Years Students	(N=67)	(9) 13.4%
Secondary Students	(N=133)	(37) 27.8%
Parents	(N= 161)	(49) 30.4%
Community, incl. Other	(N=43)	(18) 41.9%
Employees, CUPE	(N= 19)	(8) 42.1%
Employees, Other	(N=15)	(3) 20.0%
Employees, GITA	(N=44)	(14) 31.8%

Several GISS staff commented on perceived inefficiencies in the GISS timetable, noting that *"students would like more flexibility and choice"* and that *"work zones are a waste of teaching and learning time"* and that *"the timetable causes competition between performance and academics"* which should be avoided, *"so students can do well in both."*

Two parents expressed concern about the length of the school day, and resulting student loss of interest. Two parents shared thoughts on ways of better organizing the school schedule. One said, *"I'd like to see a more flexible schedule for Grade 9-12 Outer islands students, so they can work from home independently.".* The other said, *"Time could be increased and better organized by having a five-day week."*

Student: *"There could be 'less schedule', less time for teaching, and more time for learning and inquiry."*

The School Day

There were 698 responses from 672 respondents because some elected to respond to more than one response option within a question.

Four questions were posed to all groups, with the exception of one concerning flexible attendance that was not asked of elementary students, as it was deemed both too difficult to understand, and irrelevant to their school experience.

Responses are shown as a percentage relative to the number of respondents in each group, not the overall total.

Statement: "I think the school day should be longer".

The total number of elementary responses to this question was 18/190 (9.47%), indicating their weak support from this idea.

Response Group	**Responses to this question as percentage**
K-5 Students, Outer Islands (N= 79)	(11) 13.9%
K-5 Students, Salt Spring (N=111)	(7) 6.3%

Statement: "When I think about the ideal school DAY, and what I value and would support, I think about a longer school day".

The total number of responses to this question was 19/482 (3.9%), thus indicating, again, weak support for the idea of a longer school day.

Response Group	**Reponses to This Question as Percentage**
Middle Years Students (N=67)	(6) 8.9%
Secondary Students (N=133)	(4) 3.0%
Parents (N= 161)	(5) 3.1%
Community, incl. Other (N=43)	(2) 4.6%
Employees, CUPE (N= 19)	(1) 5.3%
Employees, Other (N=15)	0
Employees, GITA (N=44)	(1) 5.3%

There was little support on the part of respondents to the idea of a longer school day. Relatively strong support for the idea came from Outer Islands' elementary students, and middle years students (including those on the Outer islands).

One parent observed that, *"the length of the school day is not relevant"* and another that *"I don't think variation of an hour or so affects things much."* One parent spoke against a longer day saying that, *"because mornings are better suited to academics, an extra morning would be better than minutes added to the end of a day."* Another advocated for a longer day, if it means more time for students to eat lunch.

A student observed that a day any longer than it is now would be difficult for Outer Islands students, which would be particularly the case for those who travel by water taxi.

Statement: "I think the school day should be shorter".

The total number of responses to this question was 47/190 (24.7%).

Response Group	**Responses to this question as percentage**
K-5 Students, Outer Islands (N= 79)	(24) 30.4%
K-5 Students, Salt Spring (N=111)	(23) 20.7%

Statement: "When I think about the ideal school DAY, and what I value and would support, I think about a shorter school day".

The total number of responses to this question was 88/482 (18.3%). Responses are shown as a percentage relative to the number of respondents in each group, not the total.

Response Group	**Responses to this question as percentage**
Middle Years Students (N=67)	(14) 20.9%
Secondary Students (N=133)	(22) 16.5%
Parents (N= 161)	(29) 18.0%
Community, incl. Other (N=43)	(10) 23.0%
Employees, CUPE (N= 19)	(1) 5.3%
Employees, Other (N=15)	(0)
Employees, GITA (N=44)	(12) 63.2%

Support for the idea of a shorter school day is greater than that for a longer school day, particularly where students are concerned. One parent advocated for a shorter day, in the context of a five-day week. K-8 Students and community members are more in support of this idea than are secondary students and parents. The strongest support comes from teachers, many of whom work at GISS, where the school day is longest. Not surprisingly, non-salaried

CUPE employees do not strongly support this idea, as it would likely have implications where pay is concerned.

Statement: "I think the school day should stay the same".

The total number of responses to this question was 116/190 (61%).

Response Group	**Responses to this question as percentage**
K-5 Students, Outer Islands (N= 79)	(48) 60.8%
K-5 Students, Salt Spring (N=111)	(68) 61.3%

Statement: ***When I think about the ideal school DAY, and what I value and would support, I think about a school day the same length as it is now.***

The total number of responses to this question was 245/482 (50.8%).

Response Group	**Responses to this question as percentage**
Middle Years Students (N=67)	(17) 25.4%
Secondary Students (N=133)	(79) 59.4%
Parents (N= 161)	(90) 55.9%
Community, incl. Other (N=43)	(17) 39.5%
Employees, CUPE (N= 19)	(14) 73.7%
Employees, Other (N=15)	(3) 20.0%
Employees, GITA (N=44)	(25) 53.8%

Where the length of the school day is concerned, all responding groups are most in favor of maintaining the current length of the school day than they are of other possibilities. There is relatively less support for the status quo amongst middle years students and some "Other" employees.

One parent advocated for days of the same length, in the context of a five-day school week. Another said, *"There's not enough learning time in multiple-grade classrooms, and that eating lunch while being read to* [which maintain the current length of the day, by devoting eating time to instructional purposes] *is difficult for the young ones."*

Statement: "When I think about the ideal school DAY, and what I value and would support, I think about a more flexible school day (for example, one that allows students to attend when they need to, based upon their program needs".

This question was not asked of elementary students. The total number of participants responding to this question was 165/482 (34.2%).

Response Group	**Responses to this question as percentage**
Middle Years Students (N=67)	(14) 20.9%
Secondary Students (N=133)	(83) 62.4%
Parents (N= 161)	(31) 19.3%
Community, incl. Other (N=43)	(19) 44.2%
Employees, CUPE (N= 19)	(3) 15.8%
Employees, Other (N=15)	(5) 33.3%
Employees, GITA (N=44)	(10) 22.7%

There is significant interest in the idea of a more flexible school day, on the part of secondary students; however, there is considerably less support for the idea on the part of other responding groups. Parents and CUPE employees are least supportive of the idea.

Middle years students advocated for a day that 'starts later and is more flexible', and one that allows 'more time for core subjects and longer breaks'. A secondary student suggested a day that starts and ends later and two others concurred, suggesting 11:00 starts and either a 5 p.m. or 7 p.m. end time.

One student, admitting to having already adopted a more flexible approach said, "The only reason I ever skip is so I can go home to work with faster Internet."

Interpretation

The literature reviewed (particularly O'Brien, 2006) strongly suggests that improvements in student learning are most closely associated with 'time-on-task' and it encourages efforts to protect and increase time that can easily be lost to any number of school-related functions. While survey respondents generally indicate that interruptions to learning time are kept to a minimum, schools would be wise to look more closely at, and distinguish between, the different types of time evidenced in classrooms, with a mind to increasing 'academic learning time'. Moreover (and following Shulman, 2010), student learning should be expected to improve as efforts to 'inverse' the 'time as constant, learning as variable' relationship are increased.

While participants express a preference for maintaining a school day the same length as it is now, they express concern is that this longer school day causes fatigue, particularly on the part of elementary students. Survey responses indicate that, while two-thirds of elementary students report having "enough time to get [their] work done"; others report either not having enough time to get their work done; wanting more time to get their work done; or both. While the majority of students said that they aren't too tired to do other things when they get home from school, more than a third said they are. The roughly 2:1 ratio of students 'not too tired', to students 'too tired' warrants further consideration, particularly as it relates to the nature and volume of homework assigned.

Participants have expressed their thoughts about the ways that different school's days are structured, offering a wide variety of ideas, particularly regarding start and finish times, the length of lunch breaks (and the fact that they necessarily serve a dual, nutritional and instructional purpose). What is not necessarily apparent, is the complexity of the district's transportation system, which requires coordination of water taxi and bus schedules, in a way that sees arrival and departure times affecting multiple schools and, to a considerable degree, determining their daily schedules.

These results indicate relatively strong support for maintaining a school day the same length as it is now. Support for a shorter school day was strongest amongst teachers (many of whom responded from the high school, where the school day is the longest) and Outer Islands' elementary students. While support for the idea of a longer school day was relatively weak overall, the percentage of Outer Islands' elementary students and middle years students who want a longer school day was noticeably higher than amongst other groups. Support for the idea of a more flexible school day was strongest amongst secondary students and community members, and weakest amongst Parents, CUPE employees and middle years students.

Breaks in the Day

Elementary students were asked to think about lunch and recess, and indicate whether or not they had enough time to eat and play by responding to one or more statements. Responses are shown as a percentage relative to the number of respondents in each group, not the total number of responses.

Statement: "I have enough time to eat and play".

The total number of responses to this statement was 135/ 190 (71.0%).

Response Group	**Responses to this question as percentage**
K-5 Students, Outer Islands (N= 79)	(51) 64.6%
K-5 Students, Salt Spring (N=111)	(84) 75.7%

Statement: "Think about lunch and recess. Response: I don't have enough time to eat and play".

The total number of responses to this question was 65/190 (34.2%).

Response Group	**Responses to this question as percentage**
K-5 Students, Outer Islands (N= 79)	(30) 38.0%
K-5 Students, Salt Spring (N=111)	(35) 31.5%

Students in grade 6-12, employees, parents and community were asked to respond to a greater number and variety of statements concerning breaks during the school day. Responses are shown as a percentage relative to the number of respondent, not the total.

Statement: "When I think about BREAKS during the school day, I think there should be a longer lunch break".

The total number of responses to this question was 120/482 (24.9%).

Response Group	**Responses to this question as percentage**
Middle Years Students (N=67)	(20) 29.9%
Secondary Students (N=133)	(54) 40.6%
Parents (N= 161)	(27) 16.8%
Community, incl. Other (N=43)	(11) 25.6%
Employees, CUPE (N= 19)	(2) 10.5%
Employees, Other (N=15)	
Employees, GITA (N=44)	(6) 13.6%

Statement: "When I think about BREAKS during the school day, I think there is enough lunch time".

The total number of responses to this question was 187/482 (38.8 %).

Response Group	**Responses to this question as percentage**
Middle Years Students (N=67)	(16) 23.9%
Secondary Students (N=133)	(39) 29.3%

Parents	(N= 161)	(70) 43.5%
Community, incl. Other	(N=43)	(20) 46.5%
Employees, CUPE	(N= 19)	(11) 57.9%
Employees, Other	(N=15)	(1) 6.7%
Employees, GITA	(N=44)	(30) 68.2%

Statement: "When I think about BREAKS during the school day, I think there should be more recess time".

The total number of responses to this question was 72/482 (14.9%). Middle years students spoke most strongly in support of this idea.

Response Group		**Responses to this question as percentage**
Middle Years Students	(N=67)	(28) 41.8%
Secondary Students	(N=133)	(6) 4.5%
Parents	(N= 161)	(23) 14.3%
Community, incl. Other	(N=43)	(7) 16.3%
Employees, CUPE	(N= 19)	(2) 10.5%
Employees, Other	(N=15)	
Employees, GITA	(N=44)	(6) 13.6%

Statement: "When I think about BREAKS during the school day, I think there is enough recess time".

The total number of responses to this question was 139/482 (28.8%).

Response Group		**Responses to this question as percentage**
Middle Years Students	(N=67)	(4) 6.0%
Secondary Students	(N=133)	(15) 11.3%
Parents	(N= 161)	(70) 52.6%
Community, incl. Other	(N=43)	(20) 46.5%

Employees, CUPE	(N= 19)	(8) 42.1%
Employees, Other	(N=15)	
Employees, GITA	(N=44)	(22) 50.0%

Statement: "When I think about BREAKS during the school day, I think there is enough transition time between classes".

The total number of responses to this question was 148/482 (30.7%).

Response Group		**Responses to this question as percentage**
Middle Years Students	(N=67)	(11) 16.4%
Secondary Students	(N=133)	(60) 45.1%
Parents	(N= 161)	(42) 26.0%
Community, incl. Other	(N=43)	(15) 34.9%
Employees, CUPE	(N= 19)	(3) 15.8%
Employees, Other	(N=15)	(1) 6.7%
Employees, GITA	(N=44)	(16) 36.4%

Interpretation

Several elementary students in each group responded to both statements, saying that*, 'It depends on the day'*; thus the number of responses slightly exceeds the number of students surveyed. Overall, the ratio of elementary students who say they have enough time to eat and play, to those who say they don't have enough time to eat and play is approximately 2:1. Nonetheless, the fact that roughly a third of students surveyed say they don't have enough time in this regard deserves further consideration.

A shortcoming of the electronic surveys is that the statement ***"When I think about BREAKS during the school day, I think that there isn't enough transition time between classes"*** was presented to employees only. Employees responded as follows: GITA employees (4), or 9.1%; and CUPE employees (2) or 10.5%. Responses are low, possibly because employees recognize that more transition time means a longer school day, or less teaching and learning time within the school day.

Overall, respondents indicate that there is sufficient recess and lunchtime during the school day. Support for the idea of a longer lunch break is strongest amongst those secondary and middle years students, and community members who responded. Employee support for this idea is notably weaker.

School day start and end times vary considerably, around the district, as shown in Appendix Seven. Start times vary by 62 minutes, when Windsor House is included; by 47 minutes otherwise. End times vary by 75 minutes when the longer secondary day is included; by 50 minutes when GISS is excluded and Windsor House's day is factored in; and by 30 minutes when both GISS's and Windsor House's days are not. Morning recesses occur in all schools but GISS, and these vary from 10-20 minutes in length. Afternoon recesses, where they are offered, vary from 10-15 minutes in length. Lunch breaks vary from 25-65 minutes in length, when GISS is included, and from 25-55 minutes when it's not. This variety comes as a response to the different amounts of instructional time required at different grade levels, and the way that schools are required to 'fit' together with each other and the transportation system, in a way that sees everyone starting and finishing at times that ensure instructional time requirements are met in between. It's a complicated matter, as reflected in participant comments.

The School Week

Tabled responses are shown as a percentage relative to the number of respondents in each group, not the total number of responses.

Statement: 'I think the school week should stay four days".

The total number of responses to this question was 124/190 (65.3%).

Response Group	**Responses to this question as percentage**
K-5 Students, Outer Islands (N= 79)	(46) 58%
K-5 Students, Salt Spring (N=111)	(78) 70.3%

Statement: "When I think about the ideal school WEEK, and what I value and would support, I think about a four-day school week".

The total number of responses to this question was 320/482 (66.4%).

Response Group	**Responses to this question as percentage**
Middle Years Students (N=67)	(53) 79.1%
Secondary Students (N=133)	(110) 82.7%
Parents (N= 161)	(90) 55.9%
Community, incl. Other (N=43)	(22) 51.2%
Employees, CUPE (N= 19)	(12) 63.2%
Employees, Other (N=15)	(9) 60.0%
Employees, GITA (N=44)	(24) 54.6%

Statement: "I think the school week should be five days".

The total number of responses to this question from elementary students was 20/190 (10.5%). This low response may be attributable, at least in part, to the fact that most have had no prior experience of a five-day week.

Response Group	**Responses to this question as percentage**
K-5 Students, Outer Islands (N= 79)	11) 13.9%
K-5 Students, Salt Spring (N=111)	(9) 8.1 %

Statement: "When I think about the ideal school WEEK, and what I value and would support, I think about a five-day school week".

The total number of responses to this question was 107/482 (22.2%).

Response Group	**Responses to this question as percentage**
Middle Years Students (N=67)	(7) 10.5%
Secondary Students (N=133)	(13) 9.8%
Parents (N= 161)	(53) 32.9%
Community, incl. Other (N=43)	(18) 41.9%
Employees, CUPE (N= 19)	(3) 15.8%
Employees, Other (N=15)	(2) 13.3%
Employees, GITA (N=44)	(11) 25.0%

Statement: "I think the school week could sometimes have 5 days and sometimes have four days".

The total number of responses to this question from elementary students was 46/190 (24.2%).

Response Group	**Responses to this question as percentage**
K-5 Students, Outer Islands (N= 79)	(22) 27.9%
K-5 Students, Salt Spring (N=111)	(24) 21.6%

Statement: "When I think about the ideal school WEEK, and what I value and would support, I think about weeks of different lengths (sometimes four-days and sometimes five-days, for example)".

The total number of responses to this question was 51/482 (10.6%). Responses are shown as a percentage relative to the number of respondents in each group, not the total.

Response Group		**Responses to this question as percentage**
Middle Years Students	(N=67)	(11) 16.2%
Secondary Students	(N=133)	(16) 12.0%
Parents	(N= 161)	(15) 9.3%
Community, incl. Other	(N=43)	(5) 11.6%
Employees, CUPE	(N= 19)	(3) 15.8%
Employees, Other	(N=15)	(1) 6.7%
Employees, GITA	(N=44)	(8) 18.2%

Interpretation

The survey results show strong support for maintaining a four-day week approach (students 84%, district employees (58%) and parents and community (55%). These results are similar to those of an on-line poll conducted January 2013, on the Salt Spring Exchange. This poll asked one question: "Would a five-day school week improve the quality of education for children in the Gulf Islands?" There were 500 responses, as follows: "Yes" (218, or 43.6%) and "No" 282 (56.4%). While this poll doesn't ask whether respondents would prefer a five-day or a four-day week approach, it can be inferred that the majority would support remaining on a four-day week, given their belief that returning to a five-day week would not improve educational outcomes.

Several survey respondents and interviewees spoke of what might best be described as an internal conflict, between their personal, positive response to the current four-day week approach and their parental and professional reservations concerning the effects that this approach might be having upon student achievement. This employee comment speaks well to it: "I'm going to separate into two sections: how I feel about the balance between work and personal life; and how I feel about it educationally, because they're different things."

Overall, more than two thirds of all respondents indicated support for the idea of a four-day school week. Support levels were lowest amongst community, GITA members and parents, and highest amongst secondary students, middle years students, and Salt Spring Island elementary students. Support for a five-day school week is significantly lower than it is for a four-day week, amongst all responding groups. It is highest amongst community and parent respondents.

Support for the idea of varying the number of days in the week (4 days some weeks; 5 days other weeks) through the school year is greater on the part of elementary students than it is where other groups are concerned, possibly because they see this possibility in simplest terms, without the complications seen by other, older respondents. Amongst the other groups, support is highest on the part of teachers, middle years students and CUPE employees.

Those electing to offer "Other" comments advocated for either a four-day or a five-day week, with one advocating for weeks of varying lengths.

The majority of students said they prefer a four–day school week. One suggested a four-day week for "elementary" and a five-day-week for "high school"; and another suggested a six-day week, with shorter days overall. One student cautioned that, with a longer week, *"It would be difficult to maintain our drive and be involved in school groups and other extra-curricular activities which require off-school time"*. The need for adequate funding, so that a five-day week could be implemented, was raised by one student, who said, *"We are not a minority."*

One employee offered this comment: *"If learning for life is 24/7/365, then "school" is all the time. We need to value all learning that students do all the time [whether at school or not]".* Others shared these ideas:

- A five-day week for elementary and middle years, and a four-day week for secondary
- An optional fifth day offering school access for secondary students
- A four-day week based upon manageable class size and personalized learning principles
- A four-day week with year-round school

One parent said, *"When we have a five-day week, my children are exhausted and become agitated. I love being able to spend a long weekend with my children. I won't send my children to school if it changes back".*

Another advocated for a four-day week conditionally, *"If there is more support for Primary students"* and went on to say, *"I believe elementary has suffered for the glory of secondary programs; AND, I think the high school programs are wonderful. Such variety, but at what cost to the younger kids – as long as there is enough support for teachers and kids who need extra help."*

One parent advocated for a five-day week, with the fifth being optional, saying *"a four-day week provides my child with a much needed break but, sometimes, she needs or wants more stimulation".* This parent is not working now, but says that *"the four-day week will be a BIG problem"* when he/she returns to work.

The comments of parents advocating for a five-day week tended to say, "anything less is 'outrageous'" and that, "if our goal is to prepare students for the world of work, then there should be five days of school."

Several parents, advocating for weeks of different lengths, said that elementary and middle years students should have five days, and secondary students five.

Windsor House parents shared that their 4.5-day week works well, but one pointed out that without a bus on the half day, child care becomes an issue, and the "flow" of the students' school week is interrupted [because the half day falls on Wednesday].

Participants speak to the many implications and practical considerations involved in scheduling five days worth of school time over four days, and of coordinating a series of four-day (and sometimes five-day weeks) with a set number of statutory and other holidays. One participant wonders:

> "…..what a four-day work week would look like in combination with more even distribution of holidays. More frequent breaks might be refreshing for people. Time and arrangement of it affecting learning isn't just about kids, it's about people who deliver learning, too."

Another suggests looking for ways, within the current calendar approach, to bring people together on Fridays:

> "We could incorporate some predictable five-day weeks and some four-day weeks and focus on connections on Fridays – the logistics are hard, but it would be worth it. If it's done intelligently……."

The school calendar is a complicated matter, even for those who work closely with it, and it's not surprising that the public suggests changes and improvements, without fully realizing their implications. For example, a participant suggestion that school be in session on the Friday preceding the stat would give rise to a five-day week followed by a three-day weekend, followed by a three-day week and a three-day weekend, contrary to the Board's commitment to deliver at least four-days of instruction every week.

The public assumes a four-day, Monday-Thursday week, with some disruption caused by an occasional shifting to Tuesday-Friday, to accommodate a Monday statutory holiday, and by several five-day weeks included either to complete the calendar or meet Ministerial time expectations. The Tuesday-Friday shift to accommodate the stat gives rise to a preceding four-day weekend, and a following two-day weekend. Two-day weekends are, the study suggests, problematic: not only do people find that two days are no longer enough to 're-charge their batteries', the Friday in session conflicts with the many Friday activities in which students, staff and families engage, and the availability of the student work force upon which local businesses are dependent.

The scheduling of five-day weeks through the year, whether to ensure sufficient hours and days to meet Ministerial time requirements, or to ensure that schools are in session on days when high school exams are scheduled, was raised as an issue by participants. They argue that non-secondary students should not have to attend on the Fridays when secondary students do, for exam-writing purposes, perhaps not realizing that secondary programs are offered at a number of district schools, beyond GISS.

The School Year

Statement: "I think the school year should be longer; should be shorter; or should stay the same".

A total of 189 responses were received from 190 elementary students. Tabled responses are shown as a percentage relative to the number of respondents in each group, not the total number of respondents.

Response Group	**Responses to this question as percentage**
K-5 Outer Islands (N= 79)	Longer 6 (7.6%); Shorter 25 (31.6%); Stay the Same 48 (60.8%)
K-5 Salt Spring (N=111)	Longer 4 (3.6%); Shorter 38 (48.1%); Stay the Same 68 (86.1%)

Statement: "When I think about the ideal school YEAR, and what I value and would support, I think about the traditional September-June year with a July-August summer holiday".

The total number of responses to this question was 317/482 (65.8%).

Response Group	**Responses to this question as percentage**
Middle Years Students (N=67)	(48) 71.6%
Secondary Students (N=133)	(99) 74.4%
Parents (N= 161)	(102) 63.4%
Community, incl. Other (N=43)	(28) 65.1%
Employees, CUPE (N= 19)	(10) 52.6%
Employees, Other (N=15)	(3) 20.0%
Employees, GITA (N=44)	(27) 61.4%

Statement: "When I think about the ideal school YEAR, and what I value and would support, I think about a school year with an earlier start date (for example, one in late August)".

The total number of responses to this question was 32/482 (6.6%).

Response Group		Responses to this question as percentage
Middle Years Students	(N=67)	(3) 4.5%
Secondary Students	(N=133)	(5) 3.8%
Parents	(N= 161)	(17) 10.6%
Community, incl. Other	(N=43)	(3) 7.0%
Employees, CUPE	(N= 19)	(1) 5.3%
Employees, Other	(N=15)	
Employees, GITA	(N=44)	(3) 6.8%

Statement: "When I think about the ideal school YEAR, and what I value and would support, I think about a school year with a later end date (for example, one in earlier July)".

The total number of responses to this question was 60/482 (12.5%).

Response Group		Responses to this question as percentage
Middle Years Students	(N=67)	(3) 4.5%
Secondary Students	(N=133)	(4) 3.0%
Parents	(N= 161)	(16) 9.9%
Community, incl. Other	(N=43)	(4) 9.3%
Employees, CUPE	(N= 19)	(1) 5.3%
Employees, Other	(N=15)	(3) 20.0%
Employees, GITA	(N=44)	(2) 4.6%

Statement: When I think about the ideal school YEAR, and what I value and would support, I think about a school year with better balance between school time and vacation time.

The total number of responses to this question was 126/482 (26.1%).

Response Group		Responses to this question as percentage
Middle Years Students	(N=67)	(15) 22.4%

Secondary Students	(N=133)	(19)	14.3%
Parents	(N= 161)	(47)	29.2%
Community, incl. Other	(N=43)	(15)	34.9%
Employees, CUPE	(N= 19)	(6)	31.6%
Employees, Other	(N=15)	(8)	53.3%
Employees, GITA	(N=44)	(16)	36.4%

Students used the "Other" option to advocate for a variety of approaches to the school year. These generally involved continuing with the traditional approach (September-June; with a two-month summer holiday), whilst trying to find a better balance between instructional time and vacation time. One student suggested that the summer vacation should shift to better coincide with the beginning and end of summer, and another suggested it should start "2-3 weeks earlier". One argued for a longer summer holiday, and one said that there should be no long break between school years because students "lose too much of what we learn in two months". Several students suggested ways of shortening the summer and re-distributing the time elsewhere in the school year. One student said, "As it stands, the traditional year works and if it ain't baroque [sic] don't fix it" and another said, in the same vein, "There's a reason why it's been around a long time … IT WORKS!"

Consistent with what employees said about wanting to preserve a traditional school year, but effect a better balance between school time and holiday time, ten "Other" comments included seven suggestions regarding ways the school year could be modified, and three advocating for the traditional two-month summer holiday.

Parents and community members offered more than forty "Other" comments. One advocated for *"an entirely new set up"* along the lines of balanced or year-round schooling; one involving, for example, *"a 6-week learning block, followed by a one-week break".* Consistent with this idea, others advocated for a shorter summer holiday, saying, for example, *"six weeks of time away from school is enough".* Another parent observed that a longer summer with shorter breaks elsewhere in the year would ensure that families, especially those who can't afford to travel and who, therefore, take their holidays locally, derive maximum benefit from the good summer weather.

The idea of flexibility and greater choice was raised by a number of parents and community members, including a grandmother and school volunteer who argues for schools being open "all year with parents being able to choose a schedule that works for their family".

Some parents advocated for an earlier school end date, *"like the States"* and others spoke against a later end date, one *"definitely not a July end date!"*

Following an agrarian line of thought, one parent having advocated for a shorter summer, suggested, *"spreading the balance of time out to other times of the year; for example, a*

week in October (harvest) and a week in May (planning)". Another parent observed, *"I can't imagine a student having to sit in classroom when it's 30 degrees outside*" and argued for preservation of the summer as it is, saying, *"[Being} a farmer, I need my daughter to help me with the harvest, which is at its peak in the summer months".* This parent offered a concluding observation: *"Summer holiday is the only large block of unscheduled time a child of school age is likely to experience – it's a precious time with lots of opportunity to learn new skills".*

Interpretation

Approximately three-quarters of elementary students prefer to see the school year stay the same length that it is now.

More than two-thirds of older students, parents and community and district employees prefer a school year organized upon traditional lines, with a July-August summer vacation. There was relatively weak support for this approach amongst non-GITA employees.

There is very little support for the idea of starting the school year earlier than it is started now. The strongest support for the idea is amongst parents, and weakest amongst secondary students, possibly because they see an earlier start impinging upon summer work time.

While the level of support for a school year with a later end date, is nearly double that of support for an earlier start date, it is still much lower than the level of support for a school year organized along traditional lines.

While most respondents prefer a traditional approach to the school year, one without an earlier start date and/or a later end date, approximately one quarter of them would like to see better balance between the school year and vacation time. Ironically, such balancing would likely involve a move away from what is considered a traditional year, and possibly towards one necessarily involving different start and end dates.

As noted previously, there is wide support for maintaining something that approaches the standard school calendar, modified to include four-day and/or five-day weeks. While most respondents prefer a traditional approach to the school year, one without an earlier start date and/or a later end date, approximately one quarter of them would like to see better balance between the school year and vacation time. Ironically, such balancing would likely involve a move away from what is considered a traditional year, and possibly towards one necessarily involving different start and end dates.

Amongst those who spoke in favor of both preservation of a two-month summer holiday and some modification of it, was member of the business community, who cautions:

> "Going back to a five-day week or adjusting the summer vacation would have an impact upon local businesses. It would depend on how much they shortened it. Summer could probably start as late as July 1st for us too because that's when it starts to "kick up", but if they shortened it on the other end, ending much before Labor Day, it would have a significant impact, because we count on the students to fulfill certain roles, working their way up from the bottom, and we can't find others to fill those roles." If we took students out of the equation until the middle of July, or before Labor Day is over, that'd have a

significant impact."

This interviewee, speaking to the way that the school calendar has evolved to have a coordinating effect, says it has:

> "…. an important part of the cycle of work and … it's like when we used to not have Sunday shopping – it was great because there was one day a week where everything was closed, we had time to do stuff, and it was a family day – but then with shift work everything changed, and Sunday became just another day. People plan for summer the way it is, and if you changed it significantly, it would put a real bump in things. …. I would like to see the summer vacation maintained and recognized as an important thing in the organization of lives of families and students, the four-day week recognized as a good thing, especially where career training is concerned….".

An important consideration for employees and students alike is the stress and fatigue they experience as a consequence of the long in-session stretches they encounter between holidays. One interviewee addressed this by speaking of "the effect of 'I have to work another 15 weeks before I get a break'…". Another said:

> "I guess I've wondered what a four-day work week would look like in combination with more even distribution of holidays. More frequent breaks might be refreshing for people. Time and arrangement of it affecting learning isn't just about kids, it's about people who deliver learning, too."

While there was once opposition to the move to a four-day week, people are now generally well adjusted to an essentially traditional year, built around that approach. It should be expected that a move back to a five-day week approach will be opposed, particularly now that many more people have now had direct experience with both and can make more informed decisions in that regard. There is less fear of the unknown now, than there was then.

Considerations for School Year Organization

Responses are shown as a percentage relative to the number of respondents, not the total number of responses.

Statement: "As the District considers different ways of organizing the school year, I think it should look more closely at increasing the amount of student learning time available".

The total number of responses to this question was 101/482 (21.0%).

Response Group	**Response to this question as percentage**
Middle Years Students (N=67)	(7) 10.5%
Secondary Students (N=133)	(25) 18.8%

Parents	(N= 161)	(43) 26.7%
Community, incl. Other	(N=43)	(13) 30.2%
Employees, CUPE	(N= 19)	(2) 10.5%
Employees, Other	(N=15)	(4) 26.7%
Employees, GITA	(N=44)	(7) 15.9%

Statement: "As the District considers different ways of organizing the school year, I think it should look more closely at decreasing the amount of student learning time available".

The total number of responses to this question was 10/482 (2.1%).

Response Group		**Response to this question as percentage**
Middle Years Students	(N=67)	(4) 6.0%
Secondary Students	(N=133)	(5) 3.8%
Parents	(N= 161)	(1) 0.6%
Community, incl. Other	(N=43)	n.r.
Employees, CUPE	(N= 19)	n.r.
Employees, Other	(N=15)	n.r.
Employees, GITA	(N=44)	n.r.

Statement: "As the District considers different ways of organizing the school year, I think it should look more closely at maintaining (keeping) the amount of student learning time available".

The total number of responses to this question was 196/482 (40.7%).

Response Group		**Response to this question as percentage**
Middle Years Students	(N=67)	(19) 28.4%
Secondary Students	(N=133)	(41) 30.8%
Parents	(N= 161)	(85) 52.8%
Community, incl. Other	(N=43)	(16) 37.2%
Employees, CUPE	(N= 19)	(9) 47.4%
Employees, Other	(N=15)	(4) 26.7%
Employees, GITA	(N=44)	(22) 50.0%

Statement: "As the District considers different ways of organizing the school year, I think it should look more closely at ways of making better, more effective use of the student learning time available".

The total number of responses to this question was 266/482 (55.2%).

Response Group		**Response to this question as percentage**
Middle Years Students	(N=67)	(15) 22.4%
Secondary Students	(N=133)	(78) 58.7%
Parents	(N= 161)	(98) 60.9%
Community, incl. Other	(N=43)	(34) 79.1%
Employees, CUPE	(N= 19)	(12) 63.2%
Employees, Other	(N=15)	(7) 46.7%
Employees, GITA	(N=44)	(22) 50.0%

Statement: "As the District considers different ways of organizing the school year, I think it should look more closely at different ways of organizing and distributing school time and vacation time".

The total number of responses to this question was 19/482 (3.9%).

Response Group		**Response to this question as percentage**
Middle Years Students	(N=67)	(8) 11.9%
Secondary Students	(N=133)	(25) 18.8%
Parents	(N= 161)	(44) 27.3%
Community, incl. Other	(N=43)	(16) 37.2%
Employees, CUPE	(N= 19)	n.r.
Employees, Other	(N=15)	n.r.
Employees, GITA	(N=44)	n.r.

Interpretation

Responses indicate a widespread interest in maintaining the amount of student learning time available (40.7% of respondents), and in looking more closely at ways of making better,

more effective use of it (55.2% of respondents). There is some interest in increasing the amount of student learning time available (21.0% of respondents); however, it is unclear whether this means increasing the total amount of time available, or maximizing the effectiveness of the time maintained. There is little interest in either decreasing student learning time (2.1% of respondents), or in different ways of organizing and distributing school time and vacation time (3.9% of respondents). The fact that parents and community members indicate a much stronger interest in looking at different ways of organizing and distributing school time and vacation time warrants further consideration.

Vacation Time

Elementary students were asked to think about vacation time and respond to four statements, presented separately. They are grouped together here, for the sake of brevity. Tabled responses are shown as a percentage relative to the number of respondents in each group, not the total number of respondents.

Statement: Think about your holidays. "The summer vacation should be shorter; should be longer; should stay the same; a shorter summer with longer holidays in the school year would be okay".

Response Group	Response to this question as percentage
K-5 Students, Outer Islands (N=79)	Shorter (5) 6.3%; Longer (42) 53.2%; Stay the Same (21) 26.6%; Shorter summer with longer holidays during the school year (18) 22.8%
K-5 Students, Salt Spring (N=111)	Shorter (3) 2.7%; Longer (53) 47.8%; Stay the Same (35) 31.5%; Shorter summer with longer holidays during the school year (20) 18%

Older students, district employees, parents and community members were asked to think about vacation time, and indicate agreement with one, or more, of four statements. Tabled responses are shown as a percentage relative to the number of respondents in each group, not the total number of respondents.

Statement: "I like the vacation times as they are".

The total number of responses to this question was 264/482 (54.8%).

Response Group	Response to this question as percentage
Middle Years Students (N=67)	(46) 68.7%
Secondary Students (N=133)	(88) 54.0%
Parents (N= 161)	(74) 46.0%
Community, incl. Other (N=43)	(21) 48.8%

Employees, CUPE	(N= 19)	(8) 42.1%
Employees, Other	(N=15)	(5) 33.3%
Employees, GITA	(N=44)	(22) 50.0%

Statement: "I would like to see the vacation times changed".

The total number of responses to this question was 45/482 (9.3%).

Response Group		**Response to this question as percentage**
Middle Years Students	(N=67)	(3) 4.5%
Secondary Students	(N=133)	(8) 6.0%
Parents	(N= 161)	(21) 13.0%
Community, incl. Other	(N=43)	(4) 9.3%
Employees, CUPE	(N= 19)	(1) 5.3%
Employees, Other	(N=15)	
Employees, GITA	(N=44)	(7) 15.9%

Statement: "I would like a shorter summer holiday, and longer holidays elsewhere in the year".

The total number of responses to this question was 88/482 (18.3%).

Response Group		**Response to this question as percentage**
Middle Years Students	(N=67)	(6) 9.0%
Secondary Students	(N=133)	(10) 7.5%
Parents	(N= 161)	(38) 23.6%
Community, incl. Other	(N=43)	(12) 27.9%
Employees, CUPE	(N= 19)	(2) 10.5%
Employees, Other	(N=15)	
Employees, GITA	(N=44)	(20) 45.5%

Statements: Students were asked to respond to "I forget too much of what I've learned, over the summer" and others to "I think that the summer vacation is too long and results in a student "learning gap".

The total number of responses to this question was 89/482 (18.5%).

Response Group		Response to this question as percentage
Middle Years Students	(N=67)	(6) 9.0%
Secondary Students	(N=133)	(22) 16.5%
Parents	(N= 161)	(36) 22.4%
Community, incl. Other	(N=43)	(9) 20.9%
Employees, CUPE	(N= 19)	(4) 21.0%
Employees, Other	(N=15)	(1) 6.7%
Employees, GITA	(N=44)	(11) 25.0%

Interpretation

Not surprisingly, a majority of elementary students (approximately 50%) agreed with the statement that the summer vacation should be longer. (And, yes, the researcher saw this one coming!)

The majority of students, but less than half of the respondents in other groups, indicated that they like vacation times as they are. Grade 6-12 students were most supportive of the summer vacation staying the same, less supportive of the idea of re-distribution of summer vacation time elsewhere in the school year, and much less in support of a shorter summer vacation.

Agreement with the idea of changing vacation times was uniformly weak, with strongest agreement coming from teachers and parents. Teachers, parents and community were most inclined to agree with the idea that the summer vacation gives rise to a "learning gap". Students were less inclined to do so.

While respondents (9.3%) were generally not in agreement with the idea of the summer vacation being changed, twice as many respondents (18.3%) indicated agreement with the idea of some summer vacation time being re-distributed elsewhere in the school year. Support for the idea was strongest amongst teachers.

Friday As a Day of No School

The questioning around this topic was structured differently for students in Grade 6-12 than it was for district employees, parents and community. Students were asked to describe

how their Fridays are spent, while the others were asked to provide their perceptions of Fridays in a number of different aspects.

Two hundred Grade 6-12 students indicated that they engage in a wide range of activities on Friday including the following, presented in descending order:

- engaging in leisure activities (137/200 or 68.5%);
- catching up on sleep (103/200 or 51.5%);
- doing homework (96/200 or 48%);
- providing support to their families (84/200 or 42%);
- working for pay (73/200 or 36.5%);
- continuing with a school program (25/200 or 12.5%);
- doing volunteer or service work (24/200 or 12%).

Students who responded using the "Other" option described a variety of activities undertaken on Fridays, including:

- attending a regular Science class; meeting with a tutor;
- teaching music and attending rehearsals and concerts, attending music lessons, and pursuing music as an interest;
- attending Air Cadets;
- traveling to Vancouver Island with family, to visit relatives, and swim.

While secondary and middle years responses are proportionately similar, when the 2:1 ratio of respondents is taken into account, secondary students indicate a higher level of engagement in work-related and volunteer/service activities, and that many more of them continue with a school program. It is perhaps not surprising to find that the most frequently identified activities of secondary and middle years students are engaging in leisure activities, catching up on sleep, and doing homework.

Adult respondents were asked to consider the statement ***"Most students do not attend classes on most Fridays, and a longer weekend results. Please consider the following statements".*** Having done so, they were asked to "***Check one or more that "ring true for you".***

Statement: "The resulting three-day weekend represents a longer student "learning gap".

The total number of responses to this question was 74/282 (26.2%)".

Response Group		**Response to this question as percentage**
Parents	(N= 161)	(45) 28.0%
Community, incl. Other	(N=43)	(19) 44.2%
Employees, CUPE	(N= 19)	(1) 5.3%
Employees, Other	(N=15)	(1) 6.7%
Employees, GITA	(N=44)	(8) 18.2%

Statement: "Students benefit by having more time to pursue other interests and activities, including employment".

The total number of responses to this question was 157/282 (55.7%).

Response Group		**Response to this question as percentage**
Parents	(N= 161)	(86) 53.4%
Community, incl. Other	(N=43)	(17) 39.5%
Employees, CUPE	(N= 19)	(12) 63.2%
Employees, Other	(N=15)	(5) 33.3%
Employees, GITA	(N=44)	(37) 84.1%

Statement: "Students not being in school on Fridays may cause difficulty for some families.

The total number of responses to this question was 94/282 (33.3%).

Response Group		**Response to this question as percentage**
Parents	(N= 161)	(47) 29.2%
Community, incl. Other	(N=43)	(25) 58.1%
Employees, CUPE	(N= 19)	(6) 31.6%
Employees, Other	(N=15)	
Employees, GITA	(N=44)	(16) 36.4%

Statement: "Families and community have adjusted well to students not being in school on Fridays.

The total number of responses to this question was 148/282 (52.5%)".

Response Group		**Response to this question as percentage**
Parents	(N= 161)	(83) 51.6%
Community, incl. Other	(N=43)	(19) 44.2%
Employees, CUPE	(N= 19)	(10) 52.6%
Employees, Other	(N=15)	(5) 33.3%
Employees, GITA	(N=44)	(31) 70.5%

Statements: Parents and community members were asked to respond to this statement: ***"School staff probably benefit by having more time to balance their work and their personal lives".*** District employees responded to a more personalized version of it: ***"The longer weekend allows for greater balance between my work and my personal life".***

The total number of responses to these statements was 136/282 (48.2%).

Response Group		**Response to this question as percentage**
Parents	(N= 161)	(58) 36.0%
Community, incl. Other	(N=43)	(20) 46.5%
Employees, CUPE	(N= 19)	(13) 68.4%
Employees, Other	(N=15)	(5) 33.3%
Employees, GITA	(N=44)	(40) 91.0%

District employees were asked to respond to two statements concerning the "compression" of five teaching days into four.

Statement: "Teaching and learning are compromised by the "compression" of five school days into four-days".

The total number of responses to this question was 14/78 (17.9%).

Response Group		**Response to this question as percentage**
Employees, CUPE	(N= 19)	n.r.
Employees, Other	(N=15)	(1) 6.7%
Employees, GITA	(N=44)	(13) 29.6%

Statement: "Teaching and learning are not compromised by the "compression" of five-days into four-days".

The total number of responses to this question was 32/78 (41.0 %).

Response Group		**Response to this question as percentage**
Employees, CUPE	(N= 19)	(10) 52.6%
Employees, Other	(N=15)	(3) 33.3%
Employees, GITA	(N=44)	(19) 43.2%

Interpretation

Survey responses suggest that:

- Parents, community and teachers are generally more concerned about the possibility of a learning gap as a result of the three-day weekend than are others.

- While there is general recognition that students not being in school on Fridays may cause difficulty for some families, most respondents think the community has adjusted well

- District employees feel strongly that the three-day weekend allows for greater balance between their work and their personal lives.

- While district employees as a whole are not overly concerned about the compression of five school days into four, a significant number of teachers feel this compression compromises teaching and learning.

- There is strong agreement with the statement that Fridays afford students other benefits and opportunities, beyond school.

Here, as in other instances, the survey responses suggest the map, but do not adequately describe the territory.

"Other" comments put forward by district employees included these ideas:

- [the four-day week] "has been an opportunity to change how we think about and approach education and learning"

- "Class size and educational changes, not the number of days, compromise teaching and learning"

- No school on Fridays means no TOCs are needed to cover classes that would otherwise be in session when coaches travel with athletic teams

- "Much as I love Fridays off I feel that, for many 'at risk' students, a fifth day of repetition and reinforcement is necessary"

- "The days [in the four-day week] are too long for elementary students"

- "Many students don't show up when we have school on Fridays"

- "Students learn a lot on weekends, too"

Parents and community members offered more than thirty "Other" comments, including these, which are grouped together thematically:

- "The four-day week is healthy for everyone, including educators. "… having more time with our children allows us ….. to continue our education with them as well". And "more

family balance – less family stress"

- "Fridays off can be beneficial to those who can afford to take students to do extra-curricular activities"
- "Very much where the world needs to go – more unstructured play time, and more time for extra-curricular interests"
- "Learning does not end when children are not in school"
- "While the community has adjusted well to the absent Friday, in the long term, it encourages disrespect to the goals of education"
- "It's a lifelong, unrealistic expectation to not work Fridays". And, "It's important to make school as realistic to the real world as possible, as the young people need the skills to manage real work hours". And, "If we're to train our children to be productive employers and responsible community members, then we must … keep them engaged in instruction five-days a week"
- "The only real issue is child care". And, "[The district] providing a day care/supervision option [on Fridays] would be ideal". And, "The four-day week discriminates against working parents and low income families"
- "We're lucky to have bright kids … it's those who struggling that need the help". And, this from a grandmother: "My grandchild spent summer and Fridays attending Sylvan Learning Centre because there was no learning assistance or support for learning gaps. At great cost, financially and otherwise, she has come out on top. Where's the school's responsibility for those who can't do that?" And, "The students who suffer most from the four-day week are those who are the most vulnerable". And, this from a health care provider: "Children from lower income families may be left at home alone on Fridays, or have no activities that day"
- "Staffs luxury should not be a priority". And, "Teachers working four days but getting paid for five … jeopardizes the students' quality of education. And, "The teachers are in an excellent position with the four-day week, at the expense of quality education that is more student focused"

Parents and community members were considerably more inclined to agree with the statement that a three-day weekend results in a longer student "learning gap" than were district employees.

Generally speaking, respondents see students who do not attend school on Fridays receiving other benefits; this is particularly the case where teachers, support staff and parents are concerned.

There was strong agreement, generally speaking, that no school on Fridays may cause hardship for some families. Community members agreed most strongly with this statement, and parents agreed least strongly.

GITA and CUPE employees identified most strongly with the idea that a longer weekend benefits school staffs, and 'Other' district employees and parents identified the least.

Amongst teachers (GITA members) responding to statements about the effects of compression of the week upon teaching and learning, most were inclined to agree that a "compressed" week does not compromise teaching and learning.

Responses were stronger to statements indicating benefits than they were to statements indicating drawbacks, suggesting that most respondents see Fridays in a more positive than negative light. Employees, for example, are considerably more inclined to agree with the statement that compression of the week does not compromise teaching and learning than they are to agree with a statement that it does.

The researcher observes, however, that this compression appears to have adversely impacted the district's International Program. This has been in place since prior to the introduction of the four-day week calendar approach. A major goal of the program is English language acquisition and enrichment in a cross-cultural context. An important source of revenue, the program is marketed in a number of different countries to families that, although they have similar and over-lapping expectations of the program, place emphasis upon different aspects of the program and its outcomes. In recent years, the program has typically drawn about 70 tuition-paying secondary students from Europe, Southeast Asia, and Central and Southern America.

With the move to a four-day school week, the district has found it increasingly difficult to market the program in countries where greatest emphasis is placed upon academic achievement, rather than the cultural exchange ('lifestyle') experience. This is because parents concerned primarily with academic achievement seriously question the value they will receive from a four-day week school, for the money they're going to spend. Their concern is reinforced by annual reports of the Fraser Institute, upon which many International agents and parents rely for information about potential schools, and which show a steadily declining rating and ranking over the period 2007-2012. An unfortunate side-effect of this is a narrowing of the range of countries and cultures represented, and of the opportunities for cultural exchange upon which the program is founded; thus, in this situation, the way time is organized has negatively impacted educational outcomes, as embodied in The Educated Citizen's awareness and understanding of, and respect for, cultural differences in a global context.

That the compressed week appears to have impacted the International Program, with its emphasis upon language acquisition, suggests that there may be a similar impact with respect to the district's French Immersion program, based at SIMS. This warrants further consideration.

Vulnerable Students

Survey respondents, while they believe that the community as a whole has adjusted to the current calendar approach, draw attention to and express concern for vulnerable, 'at risk' and Special Needs children, and express hope that the district will more carefully consider how current and future calendar approaches are impacting them and their families. Deserving

consideration is the concern expressed by a focus interviewee who spoke to the way that students identified and designated as having 'Special Needs' are impacted by the un-timely allocation of resources in the context of faster-paced four-day week delivery:

> "What could we do, if we continue with the four-day week, to ensure Special Needs students' needs are met? We're looking at models where we can help meet needs of grey area kids without having to wait for them to have a designation. Unfortunately, the government recognizes that's a big problem, but they address it the way they always do, with piecemeal allocations you have to get through hoops to get, and by the time you get them the year's a third over. You've lost the first three months. We can't wait until November to fully staff our schools, to meet students' needs."

Learning loss is a complicated matter and, while it needs to be understood in a broader societal context, responses should be carefully considered, consider the whole child, and target the greatest needs. An interviewee offers some insight:

> "To talk about a learning gap in that way is kinda like saying, 'If I want to grow big, I just need to eat food.' But that's not true. You need to [do all kinds of things] to grow big and strong effectively, and I think it's that way with the brain. If we just keep pumping information into it, it'll just get muddled, confused, exhausted and, if anything, it'll just shut down. Our end goal is learning, and learning is all of it."

Learning loss is likely to be associated with any calendar approach involving a long summer vacation. There is concern that it may occur, where vulnerable students are concerned, in relation to other holidays and three-day weekends. The literature suggests that as learning loss might be mitigated by either shortening holiday periods and inter-sessions; by providing vulnerable students with specific learning opportunities (which might include Friday and or summer learning opportunities); or some combination of the two. While such opportunities are not a panacea for larger inequities in our society that must be addressed, they will help to create a more-level playing field for all our children, and provide additional support to the most needy.

The field study suggests that the majority of respondents want to preserve the two-month summer vacation, because they see it as offering learning opportunities and experiences that go beyond, and complement, the learning opportunities offered by schools. The literature points out that this is true for some but not all students. As there is some interest in a slight shortening of the summer holiday, it would be prudent to look at the possibility of doing this, with a mind to the positive effects this might have where vulnerable students are concerned.

The conclusion of Donis-Keller and Silvernail (2009) – that districts following a four-day week have support from the public, experience either no impact or a positive impact on academic performance, and incur some financial savings, may speak to this district's experience. However, these authors also caution that "savings must be weighed against an increased length of the school day, child-care needs on the off-day, and professional development needs" for teachers. (p. 1)

Part Four: Recommendations

This study finds it difficult to determine whether the way time is organized in SD64 is affecting educational outcomes in either a positive or negative way. The Board shares strong interest in being assured that the way it organizes time is not negatively impacting student achievement. While it appears that student performance cannot be directly attributed to the way the week is organized, the Board engages in on-going data gathering and analysis, shares student achievement findings, and continues to look for, develop, and implement better, more authentic indicators of student success.

While, overall, student achievement appears to have neither benefitted nor suffered as a result of following a four-day week schedule, several things warrant particular, further consideration.

- A significant number of younger students say that they go home, after the longer school day, too tired to do other things. This may be negatively impacting their ability to successfully complete the homework assigned, which, itself, adds to their fatigue. This deserves further consideration.

- The length of the elementary lunch periods, the amount of time students have to eat within those, and the way that these periods simultaneously serve as and, for accountability purposes, are counted as non-instructional and instructional time, should be re-visited. This may be related to the matter of student fatigue.

- Staff and student comments with respect to the perceived ineffectiveness of GISS Work Zones, the slipping position of GISS in the Fraser Institute rankings, and challenges associated with marketing the International Program suggests that these factors might be inter-related, and this should be further considered.

Support for continuation of a four-day week approach appears notably stronger than for a return to a five-day week approach, particularly if financial constraint is still an operant factor, and the needs of vulnerable students are better met. Many constituents say they like the approach because it suits their lifestyles and, while this is an important consideration, it should not drive future decision-making

If the Board firmly believes a return to a five-day week is warranted for educational reasons, and if the financial picture is healthy enough to support the transition and sustain the 'new' approach, then it would be wise to do so, regardless of public opinion to the contrary. In the absence of either clear evidence that student achievement would be significantly improved by following a five-day week approach, or a financial situation sufficiently robust to support the change back, the Board is advised to intensify efforts to ensure that the quantity of time available, as distributed, is used as effectively and efficiently as possible, in a way that sees 'quality' learning time translated into sustained and improved student achievement.

If financial constraint is not an operant factor then, it appears, support for return to a five-day week would strengthen, particularly because of concerns for the well being of vulnerable students and for the ability of graduates to meet the demands of the workplace. Whether this shift in support would exceed support for continuation of a four-day week approach is a matter of conjecture.

Participants do not appear overly concerned about Friday as a day of no school, they believe families and the community have adjusted and, generally speaking, they see a variety of benefits to students and families. They do, however, express some concern about the impact of a three-day weekend on vulnerable students:

- Where concern about learning loss is expressed, it tends to be for the well-being of vulnerable students, who experience a relative lack of support and opportunity on the Fridays that school is not in session; and who require particular support when they return to school following a three-day weekend. While participants haven't expressed significant concern about learning loss over the long summer holiday, the literature suggests it occurs, particularly where these vulnerable students are concerned.

- The way resources are allocated, generally, and with respect to vulnerable students and students with special needs, particularly, may be having as great or greater impact on achievement than the way time is organized; if the way time is organized is impacting negatively upon student achievement, then resource allocation may be further compounding the problem.

There is strong interest in maintaining the current, essentially traditional school year, with its early September and late June 'bookends', two-week Christmas Break, two-week Spring Break and two-month summer holiday and, in seeming contrast to this, there is some interest in identifying ways of introducing greater balance between periods of instruction and holiday periods, by way of some re-distribution of school and vacation days. Future calendar decision-making should address this.

With the above in mind, the following recommendations are offered for the Board's consideration.

Recommendation 1: Embedded questions

That the district make a particular effort over the next year, to answer the two embedded questions, in a way that authentically informs dialogue and decision-making with respect to the 2014-2015 school calendar, and those beyond.

Helping district constituents to better appreciate and understand the complexities associated with analysis of student achievement data, the reasons behind the more-recently initiated shifting away from quantitative data towards qualitative data, the anticipated benefits of doing so, and the challenges associated with district finances as they relate to calendar considerations should facilitate future school calendar decision-making and, perhaps, help to alleviate some of the cynicism expressed by survey respondents with regards to the consultation process of which this study is part.

Recommendation 2: Regional calendar coordination

That the district maintain close contact with surrounding districts, so as to inform its consultation process with information concerning calendars being considered by them.

The networking and coordinating benefits achieved through some degree of regional coordination or standardization will be appreciated by families with children in more than one district, those moving between districts, by casual employees working in more than one district, and others. This has particular implications for families associated with Windsor House School, Crofton-based families, and siblings living in separate households in different districts.

Recommendation 3: The needs of vulnerable, at-risk students and students with special needs

That the district conduct further investigation regarding the ways that families with vulnerable, at-risk students, or students with special needs might be negatively impacted by the current calendar approach and other calendar approaches under consideration. Look at the ways that that school calendar and allocation of resources intersect to impact these students, whose needs should stand amongst the lenses and filters brought to bear upon future decision-making.

Recommendation 4A and B: Learning or opportunity loss

That the district regard what is lost over the summer vacation as not so much "learning" on the part of all students, as it is "opportunity", particularly where the district's vulnerable, at-risk students and students with special needs are concerned. That it look for ways to ensure greater learning opportunity for these students. Financial considerations notwithstanding, this could involve provision of service on Fridays and during the summer, in cooperation with other service providers, and the greater community.

That more-focused efforts to address learning or opportunity loss begin at the early primary level, to ensure that disadvantaged primary-level students can begin, as much as possible, on an equal footing, and the benefits of mitigation accumulate and the gap is reduced, as these students progress through the grades.

Recommendation 5: Higher order teaching, learning and assessment

That the district continues to promote instructional delivery more focused upon higher order teaching, learning, and assessment, consistent with growing demands for "21st Century Learning".

Teachers have indicated that they are revising their instructional approaches consistent with theories concerning teaching and learning in a 21st century context, and as a response to a longer, compressed school day and week. Implementing the "strategic teacher professional development" called for by Rowe and Rowe (2002) will serve both purposes.

Recognize that, while such an approach could be expected to have a positive effect over time, the needs of the district's vulnerable students are, in the context of calendar-related learning loss, immediate, pressing and cumulative, and require more immediate consideration and intervention.

Recommendation 6: Homework in relation to length of the school day

That teachers engage in dialogue particularly focused on homework, particularly at the elementary level – the pedagogical rationale for assigning it, the nature and frequency of it, and the possible effects of assigning it to, in particular, those students who say they go home too tired to do it, or other things.

Such dialogue may lead to greater consistency arising out of shared understanding about the role of homework, its effects, and this will help mitigate the negative effects of compressed school time.

Recommendation 7A and B: Calendar complexity

That the Board intensifies efforts to help people better understand calendar complexity.

Assuming continuation of the four-day week for at least the 2013-2014 school year, and recognizing the Board's commitment to ensuring that every school week will involve at least four days, it would be appreciated if the Board scheduled five-day weeks in ways that make more sense and are more "predictable" to people. Fridays in session and two-day weekends warrants further consideration, recognizing that many families have students engaged in out-of-school and, in some cases, off-island, programs and activities on Fridays. These are valued and seen by many as a legitimate part of an education that includes, but reaches beyond schooling.

That the Board promote greater understanding and appreciation, on the part of the public, of the transportation system's complexity and the way that the transportation schedules drive the daily schedules of individual schools.

The transportation schedule and the attendant school schedules have evolved over time, and represent a considered and practical response to logistical constraints as they impact on needs of the system, the schools, and the students and families. (This might be undertaken, as a writing project, by a secondary student with an inclination towards research or journalism, and a mentor who understands this system.)

Recommendation 8A and B: GISS Work Zones, and The International Program as currently impacted by the way time is organized

That the Board look more closely at GISS Work Zones, to ensure alignment between their intended purpose(s), and the ways they are being used, and the ways they might be affecting student achievement.

Look for ways to address the academic concern shared by some International parents and their agents, in a way that serves program marketing, ensures cultural diversity, and the continuation of this significant source of funding.

Recommendation 9: An essentially 'traditional' calendar approach

That the Board continues as much as possible with the essentially 'traditional' calendar approach favored by participants.

Taking either a four-day or five-day week approach, look at the possibility of slightly reducing the length of the summer in order to establish the greater balance called for by participants, and reduce the fatigue and stress experienced by students and staff over the longer instructional stretches.

Recommendation 10: A Steering Committee

That the district strike a steering committee to advise the Board with respect to the contents of this report and the recommendations made therein, and to assist it in development of implementation strategies and a timeline.

Ensure that decisions are made with the district's vulnerable, at-risk students and students with special needs in mind. Membership might include a district level administrator (the Director of Learning, for example), school administrators and teachers representing the K-12 spectrum, at least one classroom-based support worker, and DPAC member.

Part Six: Concluding Comments

The researcher was impressed by the depth and breadth of thought put into the participants' responses but was obliged, given the scope and limitations of the study, to screen responses for those related most directly to an effort to answer the research question posed by the Board of Education. Doing so does not diminish the importance of such considerations as class size and composition issues, staff-student relationships, student motivation and attendance levels, school discipline policy and practice, and course rigor, as far as the overall effectiveness of district programs are concerned.

While the research question focuses on student learning rather than upon instruction, it must be acknowledged that, rising to the surface in the survey responses, is recognition of the importance of effective teaching, a strong interest in looking at ways of better organizing time and other resources for student learning, and ways of achieving more effective and efficient delivery of programs. Amongst respondents is a clear recognition that any consideration of the way organization of school time impacts student achievement necessarily involves matters of both 'quantity' and 'quality' of teaching and learning time.

Several educators interviewed spoke of how their pedagogical understandings are shifting as context changes:

> "There's been a shift in our understanding of how people think and how ideas are put together. Pedagogy is shifting around, so we're not locked into subject-based thinking anymore. We're looking at bigger picture things – it's a response to the way of the world, but in my classroom it's a shift in the way I think about things."

They describe their efforts to change their instructional approaches in response to the compression of time resulting from adoption of the four-day week, and are excited about the professional development undertaken in support of this and other changes. Several spoke of challenges they have had, and continue to have, adjusting instruction (in terms of both what is taught, and how) to both 'fit' a more compressed week and meet the demands of 21st century learning. Their experiences and literature review findings point to the value of continuing the shift in ways, "supported by strategic teacher professional development". (Rowe and Rowe, 2002)

With respect to the SD64 calendar, participants spoke with passion about what is being lost and what needs fixing, and what's working, what's being gained, and what might be possible. Ultimately, it may well be that public discourse is being focused more on what is seen to be an educational deficit – on what is being 'lost' – at the expense of discourse more broadly focused on what is being gained, and what there is to be gained, as school districts and communities work together to re-shape the education system, in a way that anticipates our future more than it reflects our past.

The researcher notes and feels compelled to mention that, amongst student responses, there were very few that called for less bullying or an end to bullying (none amongst 190 elementary students, two from 200 students in Grades 6-12, and one from a parent who indicated that, while his/her child's bullying had been addressed, it had been, nonetheless, disturbing for all involved). This low incidence speaks well of the district's culture of caring and acceptance, but underscores the need for on-going vigilance on the part of adults and peers, discussion, and support for anyone being bullied.

A number of respondents offered observations on the survey itself. An employee suggested that, "Money and budget inspires this [study], with the guise of concern for education." One parent respondent commented, "I feel like the questionnaire is limited in scope and will likely deliver the outcome intended by its creator". Another parent offered this concluding comment, "…. finally, it's difficult to understand the purpose of the questionnaire – other than "ways" to organize the school year. I'd be interested to hear from pedagogues and students from our school district about content rather than time frames." The following parent comment is presented in full below, to acknowledge skepticism regarding the school calendar consultation process of which this study is part; because it makes a particular point about a weakness inherent in survey instruments such as those employed in this study; and because it speaks to the important role played by nuance in promoting understanding.

> "The questions force the answerer into a one size fits all solution. The time/educational requirements of a child in kindergarten are markedly different from those in senior high school, and the survey answers do not allow for that. Some/many of the questions have (or should have) nuanced answers. Simply ticking yes or no doesn't reflect those nuances. For instance it doesn't allow someone to strongly disagree or strongly agree with a particular answer. Fundamentally it seems that the survey is so general that the answers will be able to be used to justify any course of action. I'm left wondering if it's simply being used to justify decisions that the school board wants to make (and have predetermined) rather than feeding in to the planning process."

The researcher thanks the nearly 700 people who have participated in and lent their voices to this project. In most cases, a survey question received "Other" comments from approximately 20% of parents, community members, employees and students in Grades 6-12 responding. Their 'tick the box' responses were qualified by additional comments, advanced for a variety of reasons: concern for the integrity and future of the public educational system, for the well-being of students, and to advocate for the status quo, for slight change, for dramatic change, and for a return to a calendar involving a five-day school week. Some carried overtones of frustration and resentment, and some tinges of humor; all, however, were thoughtful and reflected over-riding concern for student and district well being.

Taken together, these have provided the nuance that several participants have called for – the nuance that 'springs from the spirit of the place', defines the character of the people, and speaks to the complexity of the problem under consideration.

Wagner (2010) concludes that, "Instituting better assessments is the one most important change we could make tomorrow that would have the greatest impact, but…we first must have a long-overdue dialogue – a discussion that might well start with a simple admission and a question":

> "I thought I knew what students needed to learn and what a good school looks like – because I was a student once and I went to school, and it worked for me. But times have changed. And maybe students today need something different. I wonder what it is?" (pp. 268-9)

Together the participants in this study have made a meaningful contribution to this dialogue, and done much to deepen and advance it in our local context.

Schell and Penner (1993) cite Apker (1988) to say that if changes to the school calendar are to be successfully made, 'processes must be informative, collaborative, inclusive and evolutionary' and that such processes 'typically take one year to eighteen months'. Having decided to maintain a four-day week approach for the 2013-2014 school year, the Board is now in a position to consider this study and its findings, consult further with the public and ensure a school calendar consultation process that is 'informative, collaborative, inclusive and evolutionary'.

The gap we all face is not so much a 'learning' or even an 'opportunity' gap as it is a 'knowledge' gap; the gap between what we already know and think we know, and what we chose to do, or not do, with that knowledge.

Part Six: Executive Summary

The Research Question

The SD64 (Gulf Islands) Board of Education, mindful of its obligation under Policy 100, wishes to be more fully apprised of the impacts that the ways operational and instructional time is organized have had, and can be expected to have, on educational outcomes in the various school communities under its jurisdiction.

With a view to recent provincial legislation changes governing school calendars, the Board has commissioned this study, the purpose of which is to answer the following Board -posed research question:

"To what degree does the organization of time (e.g. length of day, days in week, length of breaks) in School District No. 64 affect educational outcomes?"

The research question posed, when it asks about the relationship between the way time is school organized and educational outcomes, reflects the Board's concern for the well-being and efficacy of all students, as represented in the ideal of The Educated Citizen. In attempting to answer it, the researcher has been mindful of the Gulf Islands School District's distinct context, its more recent history, and the ways these have shaped the district's past and influence the district's present and future.

Scope, Methodology and Limitations of This Study

This research study was conducted during the period September 2012 – March 2013. It includes a review of literature relevant to the research question; some analysis of qualitative data produced at school, district and provincial levels and, by way of four survey instruments and focus interviews, it draws on the experiences, thoughts, and questions of district people, as these relate to the question. The general approach has been one of 'funneling.' Fairly broad survey questions, based upon themes identified in the research literature, were asked of using four different, but parallel, survey instruments. Responses were analyzed and considered against what the research literature says with respect to key aspects of the research question. More focused, clarifying questions were asked of individuals and groups, as necessary, and results were again considered against the research literature. (Palys, 1997)

In total, at least 672 individuals participated in this research study (the researcher can't be sure because interviewees weren't asked if they submitted surveys, in the interest of anonymity and confidentiality). Surveys were submitted by: 190 elementary students who completed 'paper and pencil' surveys; 200 students in Grades 6-12; 204 parents and community members; and 78 district employees, all of whom completed on-line surveys. As survey respondents were given opportunities to give multiple responses, the total number of responses to a particular question, expressed as a percentage exceeds 100%, in some cases.

Context

The context within which the research study is situated has different interrelated aspects, including the geographic aspect, the human/historical aspect and educational/political aspect.

This district is responsible for a K-12 population of approximately 1700 students. It comprises 11 schools, all defined by the communities they serve (whether individual island communities or, as in the case of Salt Spring Island's distinct communities variously located on the island). Ten of these are located on Salt Spring, Galiano, Mayne, Saturna and the Pender Islands, with the most recent addition being located in North Vancouver.

The district is a unique community of six Southern Gulf Islands clustered together in the Salish Sea, and it is acknowledged that the district lies in the ancestral homelands of Coast Salish peoples, whose histories, cultures, and traditions figure prominently in the culture of the district and, increasingly, in the educational programs of its students.

There is no road network connecting the islands with each other, or with either the southern mainland or Vancouver Island. As a consequence, students move to, from and between schools, by way of an intricate network of water taxis, school buses, and ferries. The words of anthropologist Wade Davis (The Wayfinders, 2009) seem to speak to the essential relationships out of which the district context arises: "Just as a landscape defines character, culture springs from the spirit of place."

In the Spring of 2004, the Board of Education found itself faced with a declining enrolment, a budget shortfall, and an inability to carry on as before. In March of that year, the Board initiated a series of consultation meetings in the district's school communities, in an effort to identify the best response possible under difficult circumstances. With input from these meetings, from its Futures 64 Task Force, and from a district team sent to Boundary School District No. 51 to investigate implementation of a four-day week approach there, the Board moved, in May 2004, to implement a four-day school week. This was done according to provisions in the provincial School Calendar Regulation that allowed for local calendar modification.

The Board's decision was not easily made and, at the time, it was not well supported by the school communities. The four-day week calendar has now been implemented for 8 successive years in SD64 and, while arguments that it doesn't represent educational best practice continue to be made, it appears that this way of organizing school time has received increased acceptance over that time. Nonetheless, school and district-level administrators, teachers, support staff, parents, students and community alike wonder if, and if so, how and to what degree this 'compression' of instructional time impacts upon educational outcomes, and the Board recognizes and reflects this concern in the research question posed.

District Accountability and Student Achievement

While it is arguably true that, "the Board does not have any robust evidence" regarding the effects that implementation of a four-day school week has had over time, this would not be due to a lack of effort, on the Board's part. Through the years that the four-day week has been in place the district has, consistent with Ministerial expectation, satisfied BC School Act requirements that "each Board of Education in British Columbia [must] prepare and submit to the Minister of Education an Achievement Contract with respect to standards for student performance and plans for improving achievement in the District".

A review of Ministry and district documents offers information regarding the achievement of BC students, and of this school district's student achievement relative to the achievement of their provincial, national and international counterparts. While it suggests that district students are performing as well as their counterparts, it doesn't speak to any connection between their performance and the way the district organizes time; specifically, it suggests neither that their performance is more or less on par with that of their district counterparts because they are subject to a four-day week approach, nor that it's in spite of it.

An Overview of the Literature Reviewed

A review of the literature pertaining to four key research question considerations was undertaken. Each of these is presented separately and in referenced detail, as an appendix to this document (see Appendices One through Five). Following is an overview written in the interest of further context setting, brevity, convenience, and accessibility.

The Standard School Calendar

The literature reviewed includes the work of the Canada Council on Learning, Copple (1992), Fischel (2003), Gold (1997), Guildford (1991), Rakoff (2002) and others.

The literature concerning the North American standard school calendar provides information about its history and evolution and the reasons why it is now seen, because of its agrarian roots, to no longer meet the needs of a now essentially urban, post-industrial society. A review of this literature shows that the standard calendar evolved over time, without any centralized direction, and that this evolution happened increasingly, in response to society's increasingly urban needs. While this calendar is thought by some to have come about because someone, somewhere decided it represents educational 'best practice', the literature shows that this isn't the case. A review of this literature serves the purposes of this study by showing that the standard calendar does not, as some would argue, represent the 'gold standard' against which other calendar approaches should be measured.

As well, this literature looks at the question of the amount of time included in a typical, standard school year, the reasons why jurisdictions consider lengthening or shortening their school year, and possible effects of doing so.

The literature points to the importance of looking beneath the superficial argument that the standard calendar is an agrarian relic that should be cast off because it no longer meets the needs of our essentially urban and post-industrial society, and recognizing that it has evolved and endured not in spite of those needs, but in response to them. As well, it encourages us to distinguish between resistance to moving away from a proven and educationally sound idea, and resistance to moving away from an idea commonly held to be sound for reasons that, the literature suggests, are as much about a desire to maintain tradition and, perhaps, a fear of change, than anything else.

Ultimately, the literature suggests, some degree of school calendar standardization is needed by complex society, which requires some degree of coordination between and amongst its various functions.

Summer Learning Loss

The literature reviewed includes the work of the Canada Council on Learning (2008), Cooper (1996), Downey et al., 2004), Alexander, Entwistle and Olsen (2007), Entwistle and Alexander (1992), Kohn, Miller (2007), Sloan, McCombs et al. (2011), von Hippel et al. (2007), and others.

The literature on 'summer learning loss' is relevant because it considers the impact upon student learning of the summer vacation, typically two-months long in Canadian standard calendars, and longer in American ones. The notion of learning loss is an important consideration with respect to not only the standard calendar, but other, alternate calendars approached involving long school inter-sessions and, in the case of districts operating on a four-day week, regular three-day weekends.

The literature shows that the phenomenon arises out of standardized testing results, and that it is most likely to occur where disadvantaged students are concerned. Some researchers caution against looking for and accepting 'easy answers' and suggest that the problem of summer learning loss is over-stated, recognizing that it is based upon the results of standardized tests, whose focus is 'intellectually less ambitious' learning activities. The work of Kohn, in particular, suggests that summer learning loss is more a symptom of a greater problem, than it is the problem itself, and that loss of learning should be expected, when what is learned and the way it is learned lends itself to being forgotten. The literature suggests, as well, that the phenomenon might be a consequence of an inter-play of factors beyond the schools' purview and, for this reason, it is sometimes referred to more broadly as an 'opportunity loss'.

The literature suggests that, "perhaps the biggest learning gap we face is not a 'learning' or even an 'opportunity' gap but, rather, a knowledge gap on the part of adults concerned about these issues; the gap between what scientists and educators already know and what society does (or does not do) with that knowledge."

The literature, while it shows that summer learning loss is real, also suggests that preoccupation with the learning loss demonstrated through standardized testing, may be

distracting us from what is, ultimately, a bigger and more pressing challenge. It may well be that public discourse is being focused more on what is seen to be an educational deficit – on what is being 'lost' – at the expense of discourse more broadly focused on what is being gained, and what there is to be gained as school districts and communities work together to re-shape the education system in a way that anticipates our future more than it reflects our past.

Alternate Calendar Approaches

The literature reviewed includes the work of Alexander (2007), the American Association of School Administrators (1999), Bickford and Silvernail (2009), Cooper et al. (1996), Donis-Keller and Silvernail (2009), Hunter and the Vancouver School Board (2010), Leiseth (2008), the National Association for Year Round Education, the North Carolina School Board Association, the Saskatchewan School Trustees Association (1999), Schell and Penner (1993), Silva (2007), and von Hippel et al. (2007).

The literature on alternate calendar approaches overviews some of the reasons why school districts adopt alternate calendar approaches, which include: shortening the summer vacation, as a way of mitigating summer learning loss; attaining a better balance between school time and vacation time; lengthening the school year to increase teaching and learning time, as a way of attaining better results in national and international measures of student achievement and, by extension, enhancing a nation's ability to compete in a global economy; and direct response to local conditions and needs (as, for example, in the case of Canadian districts wanting to coincide student holiday time and times when parents are not working, "Spring Break" being a prime example).

The main types of alternate approaches and the benefits and drawbacks associated with these approaches are reviewed. Definitions of alternate calendar types are somewhat arbitrary, and individual non-standard school calendars can have characteristics of more than one model built into them. The research suggests that implementation and effects will look different from district to district, because of their varying contexts.

Overall, the research literature shows that where each of these approaches is concerned, the amount of time spent at school matters far less than the way that time is used, although the amount of learning time available matters more in the case of under-privileged students, consistent with findings related to summer learning loss. It further suggests that the extent to which students are actually engaged in learning, rather than in the many peripheral activities associated with it in a school setting, affects their achievement.

The Relationship Between Time and Learning

The literature reviewed includes the work of Bloom (1963), Carroll (1963), Copple (1992), Frederick and Walberg (1980), Hale (2007), Jez and Wassmer (2011), Leiseth (2008), O'Brien (2006), Shulman, Wagner (2010), Wiley and Harnischfeger (1974), Van Beek (2009), Venables (2011), and the Wisconsin Education Council.

The literature on the relationship between time and learning shows that, in recent decades, there has been a growing awareness of the increasing complexity of our world, and a growing concern that schools are not adequately preparing students to take their places in it. National and international differences in student achievement have compelled policy makers to look for reasons underlying these differences, which are thought to relate to differences in the length of the school day and the school year. They assume a causal relationship between the two; that there is a direct, causal relationship between the amount of time students spend in school, and their achievement. As this assumption appears to underpin the research question, this part of the literature review explores this relationship and the myriad variables that affect it.

This literature distinguishes between the different types of school time involved in students' school experiences, showing that these types can be expected to have different effects, and it explores the effects that *quantity* of time and *quality* of time can be expected to have on student achievement. As well, it explores the implications of learning design that establishes time as the constant and learning as variable, as compared with design that establishes learning as the constant and time as the variable.

Ultimately, the literature on the relationship between time and learning shows that, while time can be an important variable, it is not the only variable, and that it is virtually impossible to determine with any degree of certainty the nature and extent of the relationship, without controlling for the other variables.

Study Findings

This study finds it difficult to determine whether the way time is organized in SD64 is affecting educational outcomes in either a positive or negative way. The Board shares strong interest in being assured that the way it organizes time is not negatively impacting student achievement. While it appears that student performance cannot be directly attributed to the way the week is organized, the Board engages in on-going data gathering and analysis, shares student achievement findings, and continues to look for, develop, and implement better, more authentic indicators of student success. Overall, student achievement appears to have neither benefitted nor suffered as a result of following a four-day week schedule.

Support for continuation of a four-day week approach appears notably stronger than for a return to a five-day week approach, particularly if financial constraint is still an operant factor, and the needs of vulnerable students are better met. Many constituents say they like the approach because it suits their lifestyles and, while this is an important consideration, it should not drive future decision-making

Study findings and conclusions are summarized as follows:

- The ratio of elementary students who say they have enough time to eat and play, to those who say they don't have enough time to eat and play is approximately 2:1. The fact that roughly a third of students surveyed say they don't have enough time in this regard deserves further consideration.

- The school calendar and school schedules deriving from it are a complicated matter, even for those who work closely with it, and it's not surprising that the public suggests changes and improvements, without fully realizing their implications.

- Participants offered a wide variety of comments regarding individual school start and finish times, without necessarily appreciating that, taken together, these come as a response to a complex situation in which different amounts of instructional time are required at different grade levels, and schools are required to 'fit' together with each other and the transportation system, in a way that sees everyone starting and finishing at times that ensure instructional time requirements are met in between.

- The district has, while operating according to a four-day week, offered programs that operate, to varying degrees, according to a five-day week, and this isn't readily apparent to the public.

- While there was once opposition to the move to a four-day week, people are now generally well adjusted to an essentially traditional year, built around that approach. It should be expected that a move back to a five-day week approach will be opposed, particularly now that many more people have now had direct experience with both and can make more informed decisions in that regard. There is less fear of the unknown now, than there was then.

- There is strong interest in maintaining the current, essentially traditional school year, with its early September and late June 'bookends', two week Christmas Break, two-week Spring Break and two-month summer holiday and, in seeming contrast to this, there is some interest in identifying ways of introducing greater balance between periods of instruction and holiday periods, by way of some re-distribution of school and vacation days. Future calendar decision-making should address this; ironically, such balancing would likely involve a move away from what is considered a traditional year, and possibly towards one necessarily involving different start and end dates.

- Parents and community members indicate a much stronger interest in looking at different ways of organizing and distributing school time and vacation time than students and employees.

- Agreement with the idea of changing vacation times was uniformly weak, with strongest agreement coming from teachers and parents.

- Where concern about learning loss is expressed, it tends to be for the well being of vulnerable students, who experience a relative lack of support and opportunity on the Fridays that school is not in session; and who require particular support when they return to school following a three-day weekend. While participants haven't expressed significant concern about learning loss over the long summer holiday, the literature suggests it occurs, particularly where these vulnerable students are concerned.

- That the compressed week appears to have impacted the International program, with its emphasis upon language acquisition, suggests that there may be a similar impact with respect to the district's French Immersion program, based at SIMS. This warrants further consideration.

- While there is general recognition that students not being in school on Fridays may cause difficulty for some families, most respondents think the community has adjusted well. There is strong agreement with the statement that Fridays afford students other benefits and opportunities, beyond school. District employees feel strongly that the three-day weekend allows for greater balance between their work and their personal lives.

- The way resources are allocated, generally, and with respect to vulnerable students and students with special needs, particularly, may be having as great or greater impact on achievement than the way time is organized; if the way time is organized is impacting negatively upon student achievement, then resource allocation may be further compounding the problem.

Part Four: Recommendations

Study participants express strong interest in maintaining an essentially 'traditional' calendar approach, involving a four-day week approach, and modified to effect greater balance between school time and vacation time. The needs of vulnerable children were identified as an important consideration. In the wake of Bill 36, it appears that there will be benefits in ensuring coordination between this district's calendar, and those of other districts in the region.

If the Board firmly believes a return to a five-day week is warranted for educational reasons, and if the financial picture is healthy enough to support the transition and sustain the 'new' approach, then it would be wise to do so, regardless of public opinion to the contrary. In the absence of either clear evidence that student achievement would be significantly improved by following a five-day week approach, or a financial situation sufficiently robust to support the change back, the Board would be wise to intensify efforts to ensure that the quantity of time available, as distributed, is used as effectively and efficiently as possible, in a way that sees 'quality' learning time translated into sustained and improving student achievement.

If financial constraint is not an operant factor then, it appears, support for return to a five-day week would strengthen, particularly because of concerns for the well being of vulnerable students and for the ability of graduates to meet the demands of the workplace. Whether this shift in support would exceed support for continuation of a four-day week approach is a matter of conjecture.

With this in mind, the following recommendations are offered for the Board's consideration.

Recommendation 1: Embedded questions

That the district make a particular effort over the next year, to answer the two embedded questions, in a way that authentically informs dialogue and decision-making with respect to the 2014-2015 school calendar, and those beyond.

Helping district constituents to better appreciate and understand the complexities associated with analysis of student achievement data, the reasons behind the more-recently initiated shifting away from quantitative data towards qualitative data, the anticipated benefits of doing so, and the challenges associated with district finances as they relate to calendar considerations should facilitate future school calendar decision-making and, perhaps, help to alleviate some of the cynicism expressed by survey respondents with regards the consultation process of which this study is part.

Recommendation 2: Regional calendar coordination

That the district maintain close contact with surrounding districts, so as to inform its consultation process with information concerning calendars being considered by them.

The networking and coordinating benefits achieved through some degree of regional coordination or standardization will be appreciated by families with children in more than one district, and those moving between districts, by casual employees working in more than one district, and others. This has particular implications for families associated with Windsor House School, Crofton-based families, and siblings living in separate households in different districts.

Recommendation 3: The needs of vulnerable, at risk students and students with special needs

That the district conduct further investigation regarding the ways that families with vulnerable, at-risk students, and students with special needs might be negatively impacted by the current calendar approach and other calendar approaches under consideration. Look at the ways that that school calendar and allocation of resources intersect to impact these students, whose needs should stand amongst the lenses and filters brought to bear upon future decision-making.

Recommendation 4A and B: Learning or opportunity loss

That the district regard what is lost over the summer vacation as not so much "learning" on the part of all students, as it is "opportunity", particularly where the district's vulnerable, at-risk students, and students with special needs are concerned. That it look for ways of to ensure greater learning opportunity for these students. Financial considerations notwithstanding, this might involve provision of service on Fridays and during the summer, in cooperation with other service providers, and the greater community.

That more-focused efforts to address learning or opportunity loss begin at the early primary level, to ensure that disadvantaged primary-level students can begin, as much as possible, on an equal footing, and the benefits of mitigation accumulate and the gap is reduced, as these students progress through the grades.

Recommendation 5: Higher order teaching, learning and assessment

That the district intensifies efforts to promote instructional delivery more focused upon higher order teaching, learning, and assessment, consistent with growing demands for "21st Century Learning".

Teachers have indicated that they are revising their instructional approaches consistent with theories concerning teaching and learning in a 21st century context, and as a response to a longer, compressed school day and week. Recognize that, while such an approach could be expected to have a positive effect over time, the needs of the district's vulnerable students are, in the context of calendar-related learning loss, immediate, pressing and cumulative, and require more immediate consideration and intervention.

Recommendation 6: Homework in relation to length of the school day

That teachers engage in dialogue particularly focused on homework, particularly at the elementary level – the pedagogical rationale for assigning it, the nature and frequency of it, and the possible effects of assigning it to, in particular, those students who say they go home too tired to do it, or other things.

Such dialogue may lead to greater consistency arising out of shared understanding about the role of homework, its effects, and this will help mitigate the negative effects of compressed school time.

Recommendation 7A and B: Calendar complexity

That the Board intensifies efforts to help people understand calendar complexity.

Assuming continuation of the four-day week for at least the 2013-2014 school year, and recognizing the Board's commitment to ensuring that every school week will involve at least four days, it would be appreciated if the Board scheduled five-day weeks in ways that make more sense and are more" predictable" to people.

Fridays in session and two-day weekends warrants further consideration, recognizing that many families have students engaged in out-of-school and, in some cases, off-island, programs and activities on Fridays. These are valued and seen by many as a legitimate part of an education that includes, but reaches beyond schooling.

That the Board promote greater understanding and appreciation, on the part of the public, of the transportation system's complexity and the way that the transportation schedules drive the daily schedules of individual schools.

The transportation schedule and the attendant school schedules have evolved over time, and represent a considered and practical response to logistical constraints as they impact on needs of the system, the schools, and the students and families. (This might be undertaken as a writing project, by a secondary student with an inclination towards research or journalism, and a mentor who understands this system.)

Recommendation 8A and B: GISS Work Zones, and the International program as currently impacted by the way time is organized

That the Board look more closely at GISS Work Zones, to ensure alignment between their intended purpose(s), and the ways they are being used, and the ways they might be affecting student achievement.

Look for ways to address the academic concern shared by some International parents and their agents, in a way that serves program marketing, ensures cultural diversity, and the continuation of this significant source of funding.

Recommendation 9: An essentially ' traditional' calendar approach

That the Board continues as much as possible with the essentially 'traditional' calendar approach favored by participants.

Taking either a four-day or five-day week approach, look at the possibility of slightly reducing the length of the summer and in a way that both finds the greater balance called for by participants, and reduces the fatigue and stress experienced by students and staff over the longer instructional stretches.

Recommendation 10: A Steering Committee

That the district strike a steering committee to advise the Board with respect to the contents of this report and the recommendations made therein, and to assist it in development of implementation strategies and a timeline.

Ensure that decisions are made with the district's vulnerable, at-risk students and students with special needs in mind. Membership might include a district level administrator (the Director of Learning, for example), school administrators and teachers representing the K-12 spectrum, at least one classroom-based support worker, and DPAC member.

Concluding Comments

With respect to the SD64 calendar, participants spoke with passion about what is being lost and what needs fixing, and what's working, what's being gained, and what might be possible. Ultimately, it may well be that public discourse is being focused more on what is seen to be an educational deficit – on what is being 'lost' – at the expense of discourse more broadly focused on what is being gained, and what there is to be gained, as school districts and communities work together to re-shape the education system, in a way that anticipates our future more than it reflects our past.

The researcher was impressed by the depth and breadth of thought put into the participants' responses but was obliged, given the scope and limitations of the study, to screen responses for those related most directly to an effort to answer the research question posed by the Board of Education. Doing so does not diminish the importance of such considerations as class size and composition issues, staff-student relationships,

student motivation and attendance levels, school discipline policy and practice, and course rigor, as far as the overall effectiveness of district programs are concerned.

The researcher thanks the nearly 700 people who have participated in and lent their voices to this project. In most cases, a survey question received "Other" comments from approximately 20% of parents, community members, employees and students in Grades 6-12 responding. Taken together, their responses have provided the nuance that several participants suggested 'tick the box' surveys could not – the nuance that 'springs from the spirit of the place', defines the character of the people, and speaks to the complexity of the problem under consideration.

Wagner (2010) concludes that, "Instituting better assessments is the one most important change we could make tomorrow that would have the greatest impact, but…we first must have a long-overdue dialogue – a discussion that might well start with a simple admission and a question":

> "I thought I knew what students needed to learn and what a good school looks like –because I was a student once and I went to school, and it worked for me. But times have changed. And maybe students today need something different. I wonder what it is?" (pp. 268-9)

Together the participants in this study have made a meaningful contribution to this dialogue, and done much to deepen and advance it in our local context.

Appendix One

The School Calendar: A Review of the Literature

TABLE OF CONTENTS

Part One: The Standard School Calendar

Definition

When we speak of a standard school calendar, we refer to a school year that typically runs for ten months during the period September – June, has a long summer vacation in July and August and shorter vacations in December and March. This calendar, and slight variations on it, has seen widespread implementation across North America for decades.

The Canada Council on Learning (CCL) offers insight into the standard calendar's raison d'etre, stating, (June 12, 2008) "The Canadian school year reflects the historical demands of the agricultural cycle. Students attend school in the winter and spring but not during the summer harvest. Despite the shift from a rural and agrarian society to one that is primarily urban, this academic calendar remains dominant across the country." The idea that the modern school calendar, while it originated as a direct response to the needs of an agricultural society, still dominates in a now primarily urban, industrial society requires careful consideration, particularly as the calendar's agrarian genesis and orientation are now being invoked as a reason for eliminating it.

The school year in Canada is set by individual provinces and territories, but all start within a week of September 1 and end near the last week of June.

While there is surprisingly little information about the history and evolution of the Canadian school calendar, it is helpful to recognize that its general development has followed that of the American school calendar, and that the school calendar description found on the Alberta Education website is typical of Canadian and American school calendars. With respect to the structure of the year:

> "The school year usually extends from September 1 to June 30 with minor variations from system to system. Some schools are now providing year-round schooling and other alternative timetables, and others start their school year in August rather than September. Most schools close down for two months of vacation in July and August, as well as two weeks of Christmas/winter vacation and an Easter/spring break."

With respect to the length of the year:

> "The number of instructional days may vary from 190 to 200 days. In junior high schools, the majority of courses are offered for the full school year. In senior high schools, courses may be offered for the full school year or on a semester basis [for half the year]."

Evolution of the Standard School calendar

Because the standard school calendar represents the norm with respect to the way school time is organized, a brief review of its history and evolution helps to establish a context within which to approach the research question addressed by this study. As well, it surfaces two key assumptions or beliefs: that the typical North American school calendar developed in response to the needs of an agrarian society; and that it has endured because it is believed to offer the most educationally sound approach to the way school time is organized.

Historically, the belief that it represents best practice has underpinned educational thinking and decision-making around the way school time is organized, and influenced the public's response when changes have been proposed. More recently, beliefs that the school year has evolved in response to the needs of an agrarian society and that it has endured as educational best practice, are now being called into question particularly when offered up as a reason why our now post-industrial society should change the way it organizes time for instruction.

The Standard School Calendar in British Columbia

In British Columbia, the standard school calendar has been enshrined in legislation for years. Serving as the status quo, default position, it has prescribed how much school time there would be in a school year, and how it would be distributed and utilized.

The BC Standard School Calendar is published by the Ministry of Education as a supplement to the provincial School Calendar Regulation. It appears in 5-year increments and the current publication, for the years 2008-2009 through 2012-2013, is included as Appendix One. It provides 192-194 school days per year of which no more than 6 are non-instructional. The 185-187 instructional days fall between the first Tuesday after Labor Day and the last Friday in June and are distributed in such a way as to allow a two-week Christmas holiday, a one-week spring vacation, and statutory holidays.

The Standard School Calendar prescribes the minimum amount of instructional time that students receive: for students in Kindergarten through Grade 7, it's 4.75 hours multiplied by the number of days of instruction set out in the Standard School Calendar for that year; for students in Grades 8 through 12, it's 5.15 hours multiplied by the number of days of instruction set out in the Standard School Calendar for that year.

This calendar will expire on June 28, 2013, and the Ministry of Education announced in the spring of 2012 that the standard-province-wide school calendar, with its September and June 'bookends' will not be renewed.

At that time, then-Minister of Education George Abbott stated, (in the April 27, 2012, Vancouver Sun) "The existence of a provincial school calendar created a barrier [to different calendar approaches] because many parents believe it represented best practices." Abbott explained that, "Many people think it represents 'best practice' because it is the provincial calendar, but that's not the case. In fact it's just the standard calendar

that's been around for decades, and it reflects a British Columbia that's much different from British Columbia today."

Elsewhere (in the April 26, 2012 Globe and Mail), Abbott is quoted as saying, "The standard school calendar with a 10-week summer break does not reflect good educational practice"; he spoke of the learning loss that occurs over a summer vacation of that length, and he said that, " A year-round calendar… far better reflects good teaching and learning outcomes." (What the Minister meant by the term 'year round' isn't clear, but we can assume he meant a calendar that sees students attending in more months of the year, and having a shorter summer holiday.)

While the legislation came too late in the current school year to have an impact upon the 2012-2013 school year, it paves the way for districts to contemplate possibilities for the 2013-2014 and following school years. Although districts will set their own calendars beginning with the 2013-2014 school year, the Ministry will continue to prescribe the minimum number of instructional hours in a school year.

Recognizing the Canadian public's growing interest in the alternate calendar approaches being taken around the country, and the opportunity presented by this recent change in legislation, this Board and others are considering possibilities.

The Standard School Calendar and School District 64

School District 64 has not followed the standard calendar for the past 8 years, opting instead to set its own locally modified calendar, consistent with provisions in the provincial School Calendar Regulation. The calendar for the 2012-2013 school year is included as Appendix Two of this report. This calendar contains the same number of instructional minutes as prescribed in the Standard School Calendar, because the district uses the formulae outlined in the paragraph above to determine the total number of minutes, and then distributes these over fewer and, therefore, longer school days within the September-June 'bookends', according to a four-day week, rather than five-day week schedule.

The district's schools follow a locally modified district calendar, exercising some discretion regarding the distribution of instructional minutes within a school day or week. An overview of how this is done, on a school-by-school basis, is found on the district website, and included as Appendix Three of this report.

Whereas the Standard School Calendar has typically involved 5 statutory holidays, that number increased to 8 this school year, to accommodate the recently declared provincial Family Day (the first being February 11, 2013).

In the spring of 2013, the Board will focus its consultative process on the question, 'What form will the school calendars for 2013-2014 and following school years take?' It may, if the process provides for it, set the calendar a year or two following, at the same time, consistent with the new legislation. This research study has gathered information that is expected to inform and support the Board's decision-making process.

The Way School Time is Organized in School District 64

The district's four-day week calendar follows the standard school calendar format, in terms of start and end dates, and vacation periods; however, it differs in that most weeks contain four instructional days, rather than five; and its spring vacation includes an additional week.

This calendar contains the amount of instructional minutes contained in the standard five-day week calendar and redistributes them throughout a locally modified, four-day week calendar, which, in the 2012-2013 school year, saw 29 fewer days in session than the 193 in the standard calendar.

Occasionally referred to as a 'compressed' calendar' (a term typically used to refer to college-level calendars), it requires principals to establish school days that contain sufficient instructional minutes to meet prescribed minimum instructional time requirements for that school year; have start and end times that allow for inter-school coordination of bus and water taxi times; and allow sufficient time for recess and lunch breaks. This represents a considerable challenge. Appendix Three shows how this was accomplished in the current school year.

The Agrarian Myth

During the May 1, 2012 second reading of 'Bill 36, The School Amendment Act, 2012', Robin Austin (Skeena), rose in the British Columbia Legislature to speak to the Bill, by "expos[ing] one of the great myths that we have". He clarified, saying:

> "…something that I adhered to until very recently is the notion that the North American school calendar is…because we were an agricultural country, and therefore, we took the summers off because that's when the farmers wanted to have the kids at home to be able to help on the farm."

Austin qualified his use of the term 'North American school calendar,' as follows, "I say North American because I think Ontario and Quebec initially followed what was taking place in the United States in the school system."

The comments of Minister Abbott and Mr. Austin echo thoughts expressed in an April 24, 2004, *Globe and Mail* article entitled, "Five days good, four days better?" The author, Caroline Alphonso, invokes and promotes the agrarian myth associated with the five-day calendar, as she reports on about the four-day school weeks being implemented in some Canadian jurisdictions, "A handful of rural boards in British Columbia, Alberta and Saskatchewan have tried the four-day week, and some have adopted it, giving children a chance to lend a hand on the family farm during their extra-long weekend." It went on to observe that, "Still, some parents don't want to mess with the traditional five-day week" and it quoted Frank Peters, a professor in the department of educational policy studies at

the University of Alberta, who said, “The current schedule that we operate on shouldn’t be sacrosanct.”

While it’s been long-believed that, in the United States and Canada, the earliest school calendars were laid out in response to the seasonal needs of the largely agrarian society that they served, research (notably Guildford, 1991; Copple, 1992; Gold, 1997; Rakoff, 2002; and Fischel, 2003) shows that, in fact, schools serving agricultural society were in session through the summer, and the now ubiquitous standard calendar is a more recent response to the industrialization and urbanization of the late nineteenth century. The literature suggests that the reasons underlying the emergence of the standard calendar are various, inter-connected and, ultimately, rooted in economics.

Gold (1997) draws on web-based histories of individual school districts to confirm the calendar’s agrarian roots, but dispel the idea of ‘summer off for harvesting’. He shows that, when schools were responding directly to agrarian needs, the response was a two-session school year that typically involved attendance through the summer months, with time off in fall and spring for harvesting and planting. Fischel (2003) draws on Gold to point out that this scenario is well documented in the United States and particularly so in New England, which is generally regarded as the historical leader in universal public education and whose experience, he asserts, “is most relevant to the norms that spread elsewhere”. The work of these researchers confirms that, in many states, rural schools were in session in winter and summer and off in the spring and fall during much of the nineteenth century.

A Response to Urban Rather Than Agrarian Needs?

While it seems clear that the standard school calendar was born to meet the needs of an agrarian society (Copple, 1992), it seems equally clear that it developed in response to society’s shifting needs as, increasingly people moved off the farms and into the cities (Gold, 2002), and that the two-month summer vacation evolved as an urban rather than agrarian response (Fischel, 2003). Drawing on the work of others (notably Gold, 1997; Guildford (1997); and Rakoff, 2002), Fischel asserts that, contrary to popular belief, the standard school calendar with its two-month summer vacation, developed largely in response to urban, rather than agrarian needs. This would be consistent with Wagner’s (2010) assertion that, “Our [current] system of public education came into being at the turn of the last century.”

Guildford (1991, p. 47) describes the shift away from a two-term calendar that saw students not attending during planting and harvest seasons, which varied from locale to locale, according to climate, to a one-session, nine- to ten-month year which became, increasingly, the standard after 1900.

Copple (1992; p. 1) acknowledges the September-June calendar's "two broad influences": (1) the need for children to help on the farms and in the fields (over 85 percent of the population was engaged in agriculture); and, (2) the uncomfortable heat of the summer." Prior to the advent of modern air circulation and conditioning systems, school classrooms were often too hot for teachers and students to operate comfortably. Fischel (2003) concurs, "For the first half of the century, at least, it was possible to heat buildings in the winter but not cool them in the summer. "And he adds, almost as an after-thought that speaks to the sacro-sanctity of summer, "Learning in the summer would be less than in the winter, the more so because of children's longing to be out of doors in warmer weather."

In his doctoral dissertation, Kenneth Gold (1997, chap. 2) attributes the demise of summer education in cities to Victorian era concern about children's health from mental overwork. He cites numerous medical studies from the nineteenth century that claimed that continuous study was harmful to children. In following the standard calendar's evolution, Gold (2002) shows how the purposes of summer vacation changed, from the early 1800s on.

Whereas students had been attending winter and summer, to allow for spring and autumn farm work, summer attendance was eliminated later that decade, partly in response to declining demand for calendars that followed the agrarian cycle; partly in response to a desire on the part of the affluent for family vacations and a break from the mental taxation of school, and partly out of a desire to "decongest and decriminalize crowded neighborhoods, assimilate immigrant children, and provide practical skills and a natural environment to urban children that lacked them."

The North Carolina School Board Association (2011) (NCSBA) describes the standard calendar's longevity, "Since the early 20th century, most public schools in the United States have operated on an academic calendar of 180 days, followed by a 2-3 month summer break." It explains how America had originally operated on two different calendars – a rural school calendar divided into summer and winter terms, leaving children free to assist with spring planting and fall harvest seasons; and an urban school calendar usually divided into four, year-round quarters with short breaks between each quarter. The NCSBA states that the number of annual instructional days in some of the largest cities reached as many as 240-260 days a year, with many students attending for only a portion of that, and that educational reformers, like Horace Mann, moved to merge the two calendars due to growing concern over what was then seen as insufficient rural schooling and the medical "theory" that too much time spent in school could be detrimental to a child's health. By the early 1900s, it explains, rural and urban school years were brought into conformity as the physical distance separating the two areas shortened. At this point, the urban school year had been decreased to 180 days, and the summer academic quarter had been eliminated.

The standard school calendar evolved out of an urban need to standardize both the school year and the school program. Wallace (1948) describes a shift which, in Canada, "placed the pupils of the one-room schools into 'books', or grades, saw the program of studies gradually lengthened and, by the 1870s, saw organization of students by grade into separate rooms become the rule in cities and towns."

Fischel (2003) argues that the calendar is more an urban invention, and establishes the connection between the evolution of the standard school calendar and economics, as manifested in graded schooling. As well, he alludes to the reasons why the two-month summer vacation became a widely followed practice. The standard school calendar, he writes, has its roots in an economic need for worker mobility, reflected in both agricultural and industrial sectors of the economy; and in the move from ungraded to graded schools:

> "The September-to-June school year is not an agricultural holdover. It is a coordinating device to facilitate geographic mobility. The adoption of age-graded schools, which work best if all students start together, and the growth of worker mobility, which requires extra time and amenable weather to relocate households, produced the standard calendar."

The research presents a strong argument that the standard school calendar with its two-month summer vacation evolved in response to a growing need on the part of an industrializing society, to coordinate family and other human activities. In the early years of formal schooling in America, school calendars were designed to fit the needs of each particular community (Gold, 2002). Some communities had long summer breaks that released children from school in spring to help with planting and in fall to help with the harvest, while urban schools sometimes operated on 11- or 12-month schedules. By 1900, migration from the farm to the city and an increase in family mobility created a need to standardize the time children spent in school.

Copple argues that that the standard calendar represented an effort to establish uniformity out of the increasing diversity "marked by mass migration of non-English speaking, illiterate people and rapid advancement in scientific knowledge and industrial development." The importance of education grew, she says, "as it became apparent that a more educated workforce was needed in the market-oriented economy that industrialization brought with it." (p. 1)

Fischel draws on the work of Leibowitz and Margolis (1994) to assert that this need to coordinate manifested itself in several ways. He speaks of "network effects" or "network benefits" to explain benefits of coordination similar to those achieved when a large number of telephone subscribers use compatible technologies. The network benefit of coordination or standardization, he says, is best achieved if, in a mobile society, a single school start date is adopted by as many schools as possible and if they all adopt the same basic school calendar.

One network benefit, Fischel says, "is a scale economy in teaching" in which teacher mobility is considerably enhanced through calendar coordination because, for example, new teachers could be graduated in June and start employment in September. Teacher mobility was, and continues to be considerably enhanced by having a coordinated calendar among districts. A second, closely related benefit is the greater ease of interscholastic changes as a result of family moves out of one jurisdiction and into another. A third is that coordinated school start and finish times created a window of fair-weather opportunity

where worker hiring and training, and family relocation are concerned.

These network benefits both give rise to, and depend upon, a nation-wide two-month summer vacation which, Fischel states, is a twentieth century, urban invention. This norm, he says, coordinates age-graded education in a way that keeps total social costs – family relocation and job-changing costs, especially for teachers, and the educational disruptions from having new students entering graded schools after the term has begun – at a minimum.

O'Brien (2006) draws on "Prisoners of Time" and Hawley and Darling-Hammond (1997), to present a counter argument: that the education system's reliance on what is essentially a factory model is one relic stifling America's ability to ensure an education system responsive to current needs, and in a way that allows us to understand and derive the greatest benefits possible from the relationships that can and do exist between school time and learning.

A Matter of Best Practice?

The convergence of rural and city schools on the September-to-June calendar occurred gradually between 1890 and 1920. It apparently proceeded without any central direction. Rural districts were almost entirely governed by local residents. (Tyack 1972) The state might require (sometimes without much effect) a minimum number of days of school, but the local districts had nearly absolute control over when to begin and end school terms. City schools, also largely locally governed, shortened their longer school year by eliminating regular summer classes, and rural districts lengthened their calendar by eliminating summer term and adding spring and fall to the winter term. Adoption of a common school calendar was apparently so seamless that contemporary participants did not find it remarkable enough to write down an explanation for it.

Did the ubiquity of the standard school calendar come about because it represents 'best practice'? For whom? A pre-1850 essentially agrarian society? A post-1850, increasingly urban society? Both? Who decided, and why has it endured in the face of growing concern that it no longer meets our needs?

The literature (notably Fischel, 2003) shows that standard calendar did not come about as a result of a particular decision made for a particular reason, at a particular point in time; rather, it evolved gradually over a period of approximately thirty years during the period 1890-1920. "The convergence of rural and city schools on a uniform calendar," Fischel says, "apparently occurred gradually and without any central direction", as city schools shortened their school year by eliminating the summer session, and rural schools lengthened their year by eliminating the summer session, adding sessions where there had been spring and fall holidays. Rakoff (2002) notes that 'summer-and-September' became standard by about 1920; about the time that compulsory attendance and a standard year-length had become widespread. The standardization of the year's length, however, would not have compelled local districts to adopt any particular starting date or vacation pattern.

By the 1920s, the September-to-June school year seems to have become the dominant if not the invariable norm. Copple (1992) draws on data gathered from the US Bureau of the Census (1960) and the Council of Chief State School Officers to conclude that 'from the end of World war II to the present, the lengths of the [standard] school day and school year have remained essentially unchanged.' (p. 14)

Adoption of a common school calendar was apparently so seamless that contemporary participants did not find it remarkable enough to document the reasons for it, and only a few modern authors have attempted to explain why "summer-and-September" became the national standard.

Whatever may have been the case in the past, *Prisoner of Time* author Copple (1992) argues that the traditional school calendar is inconsistent with the needs of today's society; that this is demonstrated by growing demand for supports such as extended day care and after school programs; and observes that the greatest opposition to change derives from the tradition represented by the five-day school year/day structure.

Owen (2003), citing Conley (1993) observes, "The impulse to continue in the familiar way is strong" and then cautions that, "it is important to be able to distinguish between resistance to change because it is an educationally unsound idea, or because of fear of change" and that, "if fear of change is driving the resistance, then it is important to work with stakeholders to help them look beyond their fear to analyze the benefits of change and make an educated decision."

Summary Observations: The Standard School calendar

School districts in British Columbia are now considering moves away from the standard school calendar, as a result of legislative changes that see that approach 'de-standardized', effective the 2013-2014 school year. The government has argued that this approach no longer 'reflects good educational practice' or meets society's needs; and that it represents a 'barrier' to school calendar change because 'many parents don't want to let go of it because they believe it represents best practice'.

The literature shows that the standard school calendar evolved over time, and as a result of the inter-play of a number of factors. The earliest calendars met the needs of agrarian societies and saw students attending in the winter and summer months so as to be available for farm work in the spring and autumn months. The literature dispels 'the agrarian myth', showing that the standard calendar evolved largely in response to urban rather than agrarian needs and that it provides an important coordinating function giving rise to several 'network benefits.'

As society became increasingly industrialized, the length of school years and the way that time was distributed and program delivery began to normalize in response to the desire to coordinate in the face of increasing worker, student and teacher mobility; and climatic factors affecting the comfort of students and teachers during the summer months.

This evolution occurred over time, and without any central direction.

The researcher offers the following observations, based upon this review of the literature:

As society begins to question whether the standard school calendar continues to meets its needs, and to consider alternate approaches, it's important to recognize that the standard school calendar became the norm as a result of decentralized and essentially localized processes, over time and by a process involving trial and error.

The research shows that the standard calendar evolved largely in response to urban needs that are as real now as they were in the past. Anyone considering moving away from the standard calendar in a substantial way should do so thoughtfully and carefully, with current needs clearly identified, recognizing that such moves may have economic and social costs that won't necessarily be superficially apparent. Thinking of the summer vacation, for example, Fischel (2002; pp. 25-26) observes in the context of American debate around the idea of a lengthened school year, "Summer vacation may get a bit shorter over the years, but a mobile society will still find that a longer-than-usual summer vacation period following the end of the school year in June is a less costly way to structure education than the year-round calendars that are perennially advocated by education reformers."

It's also important to look beneath the superficial argument that the standard calendar is an agrarian relic that should be cast off because it no longer meets our the needs of our essentially urban and industrial society, and to recognize that it evolved and has endured because it has, contrary to what is suggested superficially, evolved in response to those needs.

It is equally important to distinguish between resistance to moving away from what may well be a proven and educationally sound idea, and resistance to moving away from an idea commonly held to be such for reasons that, the literature suggests, have as much to do with a desire to maintain tradition and, perhaps, a fear of change, than anything else.

While it cannot be ignored that the standard school calendar's coordinating function probably serves the needs of society as a whole, it must also be recognized that individual communities have particular needs not necessarily well served by this standardized approach. To borrow loosely from John Donne, "While each of us is part unto the main, each of us is still, in the end, an island."

Appendix Two

Summer Learning Loss: A Review of the Literature

TABLE OF CONTENTS

Appendix Two: Summer Learning Loss

Before considering alternate calendar approaches and relationships between time and learning, it's important to consider a phenomenon widely-associated with the standard calendar, identified by BC's Education Minister as one of the main reasons for its cancellation, and one potentially associated with alternate calendar approaches.

Definition

The terms 'summer learning loss' and 'summer slide' refer to the loss, over the school summer holiday, of learning that took place in the months preceding that holiday. Summer learning loss is a well-documented phenomenon attributed to the length of the summer holiday associated with implementation of the standard school calendar. This loss is thought to increase with the length of the summer vacation.

The Problem

As previously discussed, the North American standard school calendar evolved in response to societal need for a long, fair weather intersession that avoided hot summer classrooms; allowed for uniform start and finish times for students and teachers; and a period of time sufficiently long to allow individuals and families to change jobs and schools, relocate households, and engage in coordinated work-related training opportunities. The long summer vacation, which both gave rise to and was reinforced by the network benefits (identified by Fischel and discussed in the previous section), is widely-seen as having an unfortunate side effect: the students' inability to retain and carry forward into the next school year, everything learned in the preceding school year.

The question of summer learning loss stands on contested ground. It is argued that the phenomenon is a significant problem. As well, it is argued that, as a problem, it is overstated. It is argued that it is a problem arising out of the way school districts structure and distribute time, and that it is a societal problem visited upon the school system. It is argued that the long summer vacation offers a much needed break from school-based learning and an opportunity to engage in other learning opportunities that contribute to development of the whole child; and, as well, that it is simply too long to ensure retention, from year to year, of all that is learned in school. Miller (2007) sees it, in the broader societal context, as an 'opportunity loss' experienced, in particular, by disadvantaged students.

The length of summer vacation varies around the world, and is typically between 6 and 14 weeks, depending on the country and district. South Korea has a summer vacation of roughly seven weeks, and it occurs during a given school year, rather than at its conclusion. Generally speaking, the Canadian summer holiday is shorter, at 8 weeks, than the American one, which is more typically around 12 weeks. (Wikipedia.org)

Miller (2007), and Taylor (2011, blogging at kaboom.org), argue that summer presents a time for unstructured play and experiential learning. “In short”, writes Taylor, “summer is a time for unstructured play, bringing with it all the rich developmental benefits that make play such a vital part of our children's lives.”

Miller says that it “occupies a specific place in the public imagination, conjuring up images of rest and relaxation, of fresh air and freedom” and that, “its role in helping young people learn and develop in significant ways has been vastly underestimated”. Both describe it as a time for students ‘to expand their horizons and find their true passions, to build new relationships and master new skills—all experiences that foster learning and development’. The research on seasonal learning, writes Miller,

> “…tells us that these very kinds of non-academic experiences, so commonplace for many middle-class children, actually support learning. This learning shows up in myriad ways, including, but not limited to, reading and test scores. Informal activities at camps or with families provide a conceptual framework and context for learning: they cultivate such things as reading for pleasure and experimenting out of sheer curiosity; exploring interests and developing passions; a sense of mastery in something one cares about; and opportunities to practice and see the meaning of skills in the course of everyday life. So for the significant numbers of children who do not have access to these and other experiences, the summer can be three months too many without meaningful learning opportunities.”

The benefits and drawbacks associated with the long summer vacation are nicely summarized by the Minnesota Elementary Principal’s Association:

> “Since our agrarian beginnings, Minnesotans have valued the benefits of summer break from school and the academic calendar. Even though the practical agricultural reasons for the break have diminished significantly, the traditions and expectation remain. Summer is that carefree time of year when kids run barefoot, play night games, sleep in, stay up late, go on picnics, ride bikes, take moonlight walks, visit with friends and spend way too much time watching TV or playing video games.”
>
> “Unfortunately, summer vacation is also the time of year when students that do not engage in educational activities experience some learning loss. For low-income students, summer can be academically devastating. The learning gap between advantaged and disadvantaged learners grows by as much as two months of grade-level equivalence in just one summer.”

Nicholas Donahue, CEO of the Nellie Mae Foundation in Miller (2007) states, “What is striking is that all of these researchers have arrived at a similar set of conclusions: that children in all socioeconomic groups are learning at nearly the same rate, at least when it comes to basic skills, during the school year, and that differences in achievement between

poor and middle-class children are rooted in the inequities that young people experience outside the schoolhouse door."

Efforts to mitigate the effects of summer learning loss are various, and include increasing the number of school days in the calendar by shortening the summer vacation; changing or maintaining the number of school days in the school year, while redistributing school days and vacation days to achieve greater balance; and providing learning opportunities during the summer vacation.

In the United States, the National Summer Learning Association advocates for summer learning opportunities, particularly for disadvantaged students, as a way of mitigating summer learning loss. It does so because 'numerous studies show that summer learning opportunities improve academic outcomes for youth, as well as positively affecting their self-esteem, confidence and motivation.' This organization serves as a network hub for summer learning program providers, and provides a comprehensive overview of the research and conclusions drawn therein:

- All young people experience learning losses when they do not engage in educational activities during the summer. Research spanning 100 years shows that students typically score lower on standardized tests at the end of summer vacation than they do on the same tests at the beginning of the summer. (White, 1906; Heyns, 1978; Entwistle & Alexander 1992; Cooper, 1996; Downey et al, 2004)

- Most students lose about two months of grade level equivalency in mathematical computation skills over the summer months. Low-income students also lose more than two months in reading achievement, despite the fact that their middle-class peers make slight gains. (Cooper, 1996)

- More than half of the achievement gap between lower- and higher-income youth can be explained by unequal access to summer learning opportunities. As a result, low-income youth are less likely to graduate from high school or enter college. (Alexander et al, 2007)

- Children lose more than academic knowledge over the summer. Most children – particularly children at high risk of obesity – gain weight more rapidly when they are out of school during summer break .(Von Hippel et al, 2007)

- Parents consistently cite summer as the most difficult time to ensure that their children have productive things to do. (Duffett et al, 2004)

Together, the findings of these and other studies are offered as compelling reasons to focus education resources on providing summer learning opportunities, particularly in high poverty communities. This is because, amongst other things, differences in a child's summer learning experiences during his or her elementary school years can impact whether that child ultimately earns a high school diploma and continues on to college. (Alexander, Entwistle, & Olson, 2007)

Children who are the most susceptible to summer learning loss are those from lower socio-economic backgrounds, ethnic minorities and students with exceptionalities (Graham, 2011; Guryan & Kim, 2010; & Kim, 2006), and loss is greatest where predominantly literacy related skills are concerned. (Graham, 2011)

The Beginning School Study conducted by Entwisle and Alexander (1982) followed a sample of 790 Baltimore school children from first grade through age 22. Miller (2007) states that it illustrates the importance of summer learning loss to the test-score gap between middle and lower income students. Built on the seminal work of Heyns (1978), which studied 2,978 6th and 7th graders in the Atlanta city public schools, and was the first thorough investigation of summer learning, this study describes the lasting consequences of the summer learning gap. Entwisle and Alexander find that:

- Better-off and disadvantaged youth make similar achievement gains during the school year; but during the summer, disadvantaged youth fall significantly behind in reading.

- By the end of fifth grade, disadvantaged youth are nearly three grade equivalents behind their more affluent peers in reading.

- Two-thirds of the ninth grade reading achievement gap can be explained by unequal access to summer learning opportunities during the elementary school years; nearly one-third of the gap is already present when children begin school.

- Early summer learning losses have later life consequences, including high school curriculum placement, whether students drop out of high school, and whether they attend college.

Miller (2007) says this widening gap in achievement grows not during the school year but rather over the summer (between the spring testing and fall testing). In other words, all the increase in the achievement gap between first and fifth grade was attributable to changes in learning that occurred over the summer.

The work of Cooper et al. (1996) provides a meta-analysis of 13 research studies selected from a field of 39. Key findings were that:

- at best, students showed little or no academic growth over the summer while, at worst, students lost one to three months of learning;

- summer learning loss was somewhat greater in math than reading;

- summer learning loss was greatest in math computation and spelling;

- for disadvantaged students, reading scores were disproportionately affected and the achievement gap between rich and poor widened.

Researchers from the Ohio State University (Downey, von Hippel and Broh, 2004) extended summer learning gap research further. The results of their Early Childhood Longitudinal Study confirm the findings of Cooper et al., and earlier researchers, and shows how the learning gap widens as disadvantaged youth move through school.

Rand Corporation researchers Sloan McCombs, et al. (2011) review the literature and find that 'research has shown that students' skills and knowledge often deteriorate during the summer months, with low-income students facing the largest losses'. According to these authors, students reporting to school in the fall after a two-month summer vacation perform, on average, one month behind where they left off in the spring.

Studies in Canada show similar results. As reported in the Vancouver Province (July 27th, 2012), this finding confirmed that of researchers at the Canadian Council on Learning (CCL), whose 2008 work reviewed 39 studies (including three Canadian studies) on learning loss. They found the average summer learning loss amounted to one month per school year. If this is the case, then, the cumulative loss incurred by the average student over thirteen years of school would amount to approximately one year, and be greater for students who struggle.

The CCL's synthesis revealed that, when students' standardized test scores from the fall are compared to their scores from the previous spring, summer learning loss is equivalent, on average, to at least one month of instruction. This work also showed that summer learning loss is more pronounced for mathematics-related subjects than for reading or language arts – most likely because many students continue reading over the summer, but few of them practice their math skills.

> "Under the current [standard] calendar," states the CCL, "the summer vacation creates a gap in the learning cycle during which students forget some of what they have learned, requiring teachers to devote significant instructional time to review when students return to school. The summer break also contributes to an achievement gap between students from higher socioeconomic backgrounds and their less-advantaged classmates. Student achievement declines during the summer vacation."

The Problem, or its Symptom?

Miller (2007) acknowledges that the issue arises out of student' school achievement scores, but takes it "beyond the schoolhouse door":

> "….a number of researchers, in looking closely at achievement scores, have arrived at a strikingly similar set of conclusions: that children in all socioeconomic groups are learning at the same rate, at least when it comes to

> basic skills, during the school year, and that nearly all the differences in achievement between poor and middle-class children are rooted in the inequities that young people experience outside the schoolhouse door: namely, before they begin kindergarten, and once in school, during out-of-school time. These inequities are especially pronounced during the summer months, when middle-class children continue to learn or hold steady in reading and language skills, while poor children lose knowledge and skills."

She argues that, "the public discussion today about how to provide children with what they need to thrive in adulthood", focuses almost exclusively on what happens to them in school and that, "according to a large and growing body of research our nation's schools are doing a remarkably good job in fulfilling the role accorded to them – despite clear differential resources within and across schools [5–12]. This evidence, of course, flies directly in the face of conventional wisdom: that the nation's schools are failing its children."

We read in a UBC Human Early Learning Fact Sheet (2011), that Canada has become a country in which it is far harder for young families to 'make ends meet', in spite of a doubling in the size of the economy since the mid-1970s. Over that period, their standard of living has declined, their household incomes (adjusted for inflation) have flat-lined (in spite of an increase in the number of working women), and their housing costs have increased by 76%. Consequently, "Child vulnerability is too high (30%) and rising." This is "a silent generational crisis occurring in homes across the country", says UBC's Dr. Paul Kershaw, "because Canadians are stuck in stale debates." The document 'Community Based Literacy Programming (Geographical Region: SD64: 2011 Progress Update' suggests that this trend extends to the Gulf Islands, where the recession continues to have a growing impact", and "the situation is currently bleak."

Baines (2007) states that differences in achievement are attributable to social policies regarding poverty and healthcare; this discrepancy is not a "school problem." Miller (2007) draws on studies of seasonal learning by Burkam (2003), Borman (2004, 2006), Downey et al. (2004, 2005) and others to conclude that, "At least for kindergarten and first graders, schools serve as 'the great equalizer,' doing much more than they generally get credit for in boosting the achievement of students from low-income backgrounds."

Nicholas (in Miller, 2007), commenting on the American experience states, "While the findings regarding summer learning loss are profound, they must not distract us from the unfinished business of school improvement. Achievement is too low and the quality of school time activities is part of the problem." He goes on to say,

> "…we must broaden our thinking about student learning to include strategies that focus on where children are and what they are doing outside of the classroom. This must include a more nuanced understanding of the larger social conditions – poverty, violence, discrimination – that neuroscientists tell us influence learning and development in dramatic ways. Thus the challenge

remains a complicated and important one. We know that school and societal influences on learning are enormous and now this report provides a firm reminder that summer learning loss is a major issue as well."

While organizations like the National Summer Learning Association advocate for provision of learning opportunities during the long summer vacation, as a way of addressing the problem of summer learning loss, not everyone supports the idea.

Education author Alfie Kohn, commenting on the longer American summer vacation, argues that, "the idea of summer learning loss – the implication being that it's risky to give kids a three-month vacation from school because they'll forget everything they were taught – has become the media's favorite seasonally specific education topic." The idea, he says is, "a story we're all predisposed to embrace because we're already nervous about time off for children." The negative effect of the long summer, he says, are more limited than is generally acknowledged and it doesn't point to the solution that's most commonly endorsed.

Daniel Laitch, associate professor of education at Simon Fraser University draws attention to the fact that research on summer learning loss focuses on what has been lost, as determined by narrow, standardized measures, and not on what has been gained otherwise. He observes (Vancouver Sun, July 27, 2012) that, "Summer learning loss does seem to be real", but he cautions against 'easy answers', observing that the research measures only what kids have lost [in specific academic areas] – and not what they may have learned in other areas during the summer break." "Summer", Laitch says, "offers the gift of time, and if the point is to augment learning through the long summer days, then there's plenty of opportunity to do so without shelling out bug bucks for summer camps or extra classes."

Kohn cautions against thinking of summer learning loss as 'the problem,' and thinking of it, instead, rather as a symptom of another, more profound problem. He argues that the fact that students of low socioeconomic status experience the greatest summer learning loss has more to do with the perpetuation of class-based differences than it does with learning being something that's inevitably lost when you take a break. Referring to the work of Richard Allington, he argues that easy and continuing access to self-selected books for summer reading is a cheaper, less costly and more motivating strategy than summer school. Like Laitch, he argues against 'easy answers' and he poses a question, "We should be asking: Is there still a summer loss problem when we use more meaningful assessments, or is it an artifact of exams that we know to be deeply misleading (and to have bias built into them in various ways)?" As we don't yet know the answer to this question, he says, we should refer to the phenomenon as "summer learning loss *on standardized tests."* (note: italicized by the researcher, for emphasis)

Eisner (2000), speaking against attempts to over-simplify the complexity of student performance on the basis of scores alone, comments on Bloom's views on international comparisons:

> "One needed to know about much more than the magnitude of test scores in order to make educational sense out of them. One needed to understand the amount of time allocated to the study of the subject, one needed to understand the resources provided to schools, and one needed to understand the quality of teaching that was made available. Bloom was no mere number cruncher. He understood full well that the environment matters and that the ability to interpret test scores without understanding the environment in which those scores were produced made no real sense at all. Alas, his admonishments about such matters have not always been heeded, bearing in mind the penchant in the United States to display league tables of school performance."

Summer learning loss on standardized tests, Kohn says, relates mostly to loss of the 'factual and procedural knowledge' such as 'math computation and spelling skills' as documented by Cooper et al. (1996). He argues against defining the problem narrowly, as loss of what is learned relative to these measures and, instead, for defining the problem more broadly, as a problem with our over-reliance on a traditional approach to education. This approach is itself, he says, over-reliant upon 'intellectually less ambitious' learning activities, such as rote recall of facts. He argues for an approach more built around skill acquisition through procedural learning and inquiry. When the problem is more broadly defined, summer learning loss is seen as a symptom rather than as the problem itself; thus, summer learning loss becomes "just a subset of life learning loss – when the learning is dubious to begin with."

Summary Observations: Summer Learning Loss

The standard school calendar typically involves a two-month summer vacation, which, while evolved in response to society's needs has given rise to the problem of summer learning loss. The magnitude of the problem, it would seem, depends on what counts as learning. This would seem to depend on whether the reference is to 'education', broadly defined, or education defined more narrowly as 'schooling', and whether what is sought as an 'easy answer' or a harder one.

Miller (2007) argues that the long summer vacation period represents critical hours for learning that must be fully utilized – for those "beating the odds" during the school year and for those who are not – if we are going to meet our educational imperatives in a global economy.

This problem is likely to be associated with any alternate calendar approach involving a long summer vacation, but might be mitigated by a shortening of the summer vacation, or the introduction of summer learning opportunities, whether formal or informal.

The problem is based upon the loss of learning evidenced in student standardized test scores, when these are administered at the end of one school year, and the beginning of the next. This loss is found to be greatest in math and spelling, and to be cumulative and

particularly acute where under-privileged students, students from ethnic minority groups, and students with exceptionalities are concerned. Summer learning loss if found to contribute over time, to the widening of a gap in achievement between advantaged and less advantaged students.

Some researchers caution against looking for and accepting 'easy answers' and suggest that the problem of summer learning loss is over-stated, recognizing that it is based upon the results of standardized tests, whose focus is 'intellectually less ambitious' learning activities. The work of Kohn, in particular, suggests that summer learning loss is more a symptom of a greater problem, than it is the problem itself, and that loss of learning should be expected, when what is learned and the way it is learned lend themselves to being forgotten.

The literature on summer learning loss raises a number of important considerations for those considering either continuing with a standard school calendar, or moving to an alternate calendar approach:

- Any calendar approach involving a long summer vacation will involve some degree of summer learning loss, particularly if what is to be learned, and what is deemed to have been lost is determined through narrow, standardized testing.

- The length of the summer impacts the retention of learning on the part of under-privileged students in particular and, because the learning loss they experience is cumulative, and the effects far reaching, focused efforts to extend more continuous learning opportunities to these students should be made. As this issue has to do with matters of socio-economic status and opportunity at least as much as anything else, it may need re-framing in a way that facilitates support for these students in particular.

- Efforts to address summer learning loss should begin at the early primary level, to ensure that disadvantaged students entering school can begin, as much as possible, on an equal footing.

- An approach assuming summer learning loss is more a symptom than the problem itself might involve greater effort directed at changing instructional delivery, with more focus being placed upon higher order teaching, learning, and assessment; while such an approach could be expected to have a positive effect over time, the need to treat this loss as a problem to be mitigated, if not solved, in a more immediate way (for example through school calendar modification, and/or focused remediation) cannot be ignored.

The literature, while it shows that summer learning loss is real, also suggests that preoccupation with the learning loss demonstrated through standardized testing, may be distracting us from what is, ultimately, a bigger and more pressing challenge. It may well be that public discourse is being focused more on what is seen to be an educational deficit –on

what is being 'lost' – at the expense of discourse more broadly focused on what is being gained, and what there is to be gained, as school districts and communities work together to re-shape the education system, in a way that anticipates our future more than it reflects our past.

"The public discussion today about how to provide children with what they need to thrive in adulthood", says Miller (2007), focuses almost exclusively on what happens to them in school," and she stresses the need to broaden it. Perhaps the biggest learning gap we face, she writes, is not an education or even an opportunity gap for our children. It is a knowledge gap for the adults concerned about these issues – the gap between what scientists and educators already know and what society does (or does not do) with that knowledge. Clearly, out-of-school experiences are not a panacea for larger inequities in our society that must be addressed, but summer learning offers an important, and largely untapped, lever for change in the ongoing efforts to create a level playing field for all our children. In a participatory democracy and demanding global economy, this endeavor is an imperative.

Appendix Three

Alternate School Calendars: A Review of the Literature

TABLE OF CONTENTS

Appendix Three: Alternate School Calendars

Reasons for Adopting an Alternate Calendar Approach

The North American standard school calendar has endured for decades as a major underpinning of the educational status quo, apparently because of a widely held belief that it is the format that best meets society's needs, and represents the best way to organize time for learning.

Ballinger (1987; p. 1), cited by the Saskatchewan School Trustees Association (SSTA) (1999), states: "The September-June calendar has outlived its usefulness. Originally, it had a strong purpose: to enhance the prevailing agricultural economy of the late 19th and early 20th centuries. It was not designed to enhance instruction then, and it does not do so now." There is strong agreement on the part of educational reformers (Anton, 1995; Jones, 1995; Peyton, 1995; Kemp, 1995; Reichert, 1993; Schlecty, 1990; Mazarella, 1984; Ballinger, 1987) that this calendar's obsolescence is tied to large-scale and on-going demographic and economic changes.

There are a number of different reasons why changes to the school calendar are contemplated and made. It has been argued that, as the calendar was designed to serve the needs of a predominantly agrarian society, and as we're no longer that, it should be changed to better serve the needs of our now post-agrarian society. In some cases, the argument for change is made without there being a clear idea of what the old calendar should be replaced with; in others, it is made with a clear sense of what the new calendar should be like, often because there is a desire to address a particular, perceived need or deficiency.

A major problem associated with the standard calendar is the long summer vacation, (typically two months in Canada and longer in the United States) which gives rise to a phenomenon known as summer learning loss. While some believe that the problem of summer learning loss is best addressed through creation of summer learning opportunities, or a lengthening of the school calendar (which sees more days of instruction and fewer vacation days), others believe that the solution lies in a re-distribution of instructional and vacation days to achieve better balance. As an alternative to the provision, possibly at considerable cost to either districts or parents themselves, of summer learning opportunities, some Canadian school jurisdictions are considering other calendar approaches, either away from the standard school calendar completely, or towards some variation of it.

The main reason for going to a calendar offering a shorter summer vacation is, as already stated, that children, and particularly the disadvantaged ones, retain more of what is learned when the summer vacation is shortened. "Good educational methodology would tell us", says former BC Education Minister George Abbott (Vancouver Sun, April 27, 2012), " that . . . two or two and one-half month [holidays are] just way too long for kids who are perhaps struggling with foundation skills to be away from instruction."

In the United States, there is concern that their shorter standard calendar gives rise to loss of competitive advantage on the global stage. The North Carolina School Board Association draws on the work of Alexander (2007), Cooper et al. (1996) von Hippel et al. (2007) and Duffet et al. (2007) to express this concern, and that of summer learning loss. It asserts that, "The time has come to align the K-12 academic calendar with the realities of the modern age. If students in North Carolina and the United States are to be competitive with the rest of the world they must have a calendar that provides more academic instruction and eliminates large gaps in school years."

Some districts go to an alternate calendar form, for example, the four-day week approach, in order to reduce costs, usually those operational costs associated with either facilities (for example, heating and cooling), or transportation. The American Association of School Administrators, reported on implementation of the four-day week in New Mexico, in 1999 saying: "There was nothing noble or high-minded about the birth of the four-day school week. It was driven by the need to save money."

Schell and Penner (1993) cite Perry (1991) to say that, "According to the Ontario Select Committee on Education, in spite of economic or instructional benefits the debate regarding adjustment to the traditional school schedule centres around lifestyle." Basically, when calendar changes do occur, they tend to come either as a direct response to "an overpowering need to change, which left little alternative" or as a result of "carefully planned and executed processes for involving the community" in the decision-making (Schell and Penner, 1993). In either case, they say, "the development of essential lines of communication prior to, during and after the adoption of the new pattern are essential, since the change must be seen as a philosophy for improvement rather than a 'stop-gap' solution to be discarded when the specific problem no longer exists."

In a perfect world, such moves would not be made not in an 'either-or-way', as the authors claim they are made in our less-than-perfect world, but in a way that, to the extent that pressing circumstances allow, incorporates both approaches.

> "A variety of alternate schedules have been tried for educational reasons, but few studies have been made on the implications for learning under adjusted timetables." [Catherine Macgreggor, in Tyee)

Schell and Penner raise two very important points with respect to successful implementation of a new pattern: one being that on-going 'before, during, and after' communication processes are essential; and the other being that the change must be seen as being consistent with a philosophy of improvement, and in that sense, proactive, and not merely a short-term reaction to a specific problem.

Types of Alternate School Calendars

For information on alternate school years, the researcher draws, in particular, on the work of the Saskatchewan School Trustee Association (1999), Miller Hale (2007), Leiseth (2008) and the Vancouver School Board (2010). In conducting this research, due

consideration was given to the SSTA's caution, that "Individuals researching alternate school calendars are advised to proceed with caution, as much of the available literature is promotional in nature." Moreover, much of it is American and does not transfer directly into the Canadian context.

The SSTA's comprehensive research report, called, "Why Change the School Year?" involved interviews with seven educators directly involved in the implementation of a variety of alternate school calendars. It reviews the advantages and disadvantages of each, and provides a case study of most cases, and offers a good starting point for further research. The work of Miller Hale (2007) and Leiseth (2008) involved study of American mid-western school districts that implemented a four-day school week. Miller Hale's work includes a comprehensive description of various alternate school calendars. The Vancouver School Board (2010) examines the pros and cons of balanced calendar approaches, in a Canadian context.

Schell and Penner (1993; p. 1) note that, 'there are many successful examples of schools changing the traditional day and year schedule'. There are basically four non-traditional or alternate calendar formats: the extended day/year; year-round schooling, the four-day week; and the balanced school year.

Basic definitions of the main alternate calendar types are offered below. These are somewhat arbitrary, and it should be understood that individual non-standard school calendars can have characteristics of more than one model built into them:

- **Balanced school calendars** are those in which students attend school in more months of the year and in which holidays are more evenly distributed and of more equal length (with the exception of the summer holiday, which is sometimes longer than the other holidays, but shorter than the summer holiday found in the standard calendar). Balanced approaches are sometimes referred to as year-round calendars, because students attend over a period involving more of the year (as a consequence of the shortening of the summer vacation).

- **Extended school calendars** are those in which the year is made longer through either lengthening of the school day, or of the school year. Richmond (1978) and Anton (1995) have defined extended school calendars as any calendar designed to increase the amount of instruction received by students and, thus, any calendar approaches could, if the overall amount of instructional time is increased, be considered extended calendars. Schools in which students are organized into parallel and staggered streams, in order to alleviate crowding and maximize building use, are sometimes said to offer extended calendars.

- **The four-day week calendar**, in which most school weeks involve four rather than five instructional days. In these calendars, days tend to be longer; offering either an overall amount of instructional time equal to that offered under a standard calendar, or less (Reeves, 1999, in Miller Hale, 2007).

- **Year-round calendars** are those that see students attending for the same number of days found in the standard school calendar, and having a shorter summer and several shorter breaks throughout the school year (Chaika, 2005, in Miller Hale, 2007). Approaches in which school buildings are utilized on a year-round basis by students attending in one or more staggered streams and having several one or two week breaks are often associated with medical and dental schools and said to be 'year-round'. Balanced approaches are sometimes referred to as 'year-round calendars'.

Extended School Calendars

Extended calendars involve either an extended school day, or a longer school year. While they are usually adopted in order to increase instructional time, they are sometimes adopted to address over-crowding issues.

The SSTA (1999) reports that, in 1996, BC's Walnut Grove Secondary in Langley (SD#15) moved to an extended day program involving two staggered instructional streams, to alleviate overcrowding issues due to a lack of space. Students were able to choose whether to start their day at 7:15 am, or at 9:00 am. In summarizing the benefits and drawbacks of this approach, the SSTA observes:

> "Overall, the extended-day program is considered less successful than the traditional semester system, but under the conditions facing Walnut Grove, there seemed few options. [However,]…the extended day program allowed the school to successfully address an overcrowding issue, while maintaining a strong community."

Schools considering this approach to address an over-crowding issue are encouraged to investigate Walnut Grove's experience, and read the SSTA's report.

Currently, extended calendars are being advocated in the United States, which recognizes that it offers one of the world's shortest school years, in the interest of ensuring that American students are able to compete with better-performing students from countries with longer school years.

Bickford and Silvernail (2009) overview this approach's thirty-year history, which began in response to the National Commission on Excellence in Education's (NCEE) Nation at Risk Report and saw resurgence following the release of No Child Left Behind. This approach is seen as a response to the claim that, "expectations, content, and time needed to be improved in American education", if student achievement is to be improved, and the American education system can compete with the systems of foreign counterparts. These authors offer a detailed overview of the international comparisons made, showing that much of the information is contradictory, and they cite Silva (2007), Aronson, Zimmerman & Carlos (1998) and others to make the point.

Canadian education systems have also been subjected to comparison with other

countries and, as implied by the title of the Society for Advancing Educational Research's 1983 video, "Failing Grades", student outcomes in Canada have been shown to come up short when compared against outcomes in other developed countries (SSTA, 1999). Canadian proponents of an extended school calendar have rationalized that increased class time will increase student performance, because it allows teachers more time to use cooperative instruction (Slavin, 1990), vary instruction, integrate curriculum (Jacobs, 1989), and better accommodate different learning styles (Dunn and Dunn, 1979).

Silva's (2007) findings illustrate the range of different school year lengths, in hours, as seen around the world: Korea, 1079; Netherlands, 911; Japan, 926; Finland, 861;and United States, 799. Such comparisons are used to establish a causal relationship between the length of the American school year and the lower achievement of American students relative to their international counterparts. Aronson, Zimmerman & Carlos observe that, "American students are not so far behind in the amount of absolute time they spend in school each year as compared to their foreign counterparts . . . some countries whose students outperform ours in mathematics and science actually have a shorter school year. In Sweden, for example, whose students were among the high scorers … the school year is only 170 days long".

Effects of an Extended School Year

Baines (2007, p.99; cited by Bickford and Silvernail, 2009) calculates that, by the time children reach the age of 14 in Finland, they will have gone to school for 2,500 fewer hours than students in America (the equivalent of two to four years of schooling). Despite much longer school days, Baines observes, "American students routinely score 10% to 20% lower than Finnish students on international tests of achievement." This author suggests, consistent with some of the research associated with summer learning loss, that these differences are attributable to social policies regarding poverty and healthcare; this discrepancy is not a "school problem." Alexander, Entwisle, and Olson (2007) found that the achievement gap between students from high socio-economic backgrounds and students from low socio-economic backgrounds is the result of summer-learning differences rather than school-year learning differences.

Bickford and Silvernail review the work of Sims (2008), Lee & Barro, (2001), Eide & Showalter (1998), Grogger, (1996), Card and Krueger (1992), Rizzuto and Wachtel (1980) before observing that many studies have found "no significant connection between the length of the school year and student achievement." Moreover, they state (citing Baines, 2007, p. 99; Fisher & Berliner, 1985), "Experimental studies have repeatedly found no correlation between time spent at school and levels of achievement."

Silva (2007; in Bickford and Silvernail, 2009) cites a few studies that found a positive relationship between instructional time and student outcomes for certain students (e.g., students with lower initial test scores and students in small classes). She also notes a finding of a "moderate positive association between total school days per year and mathematics and science scores" for eighth grade students in 39 countries (p. 2).

The Third International Mathematics and Science Study (TIMSS) "found no clear pattern between the number of in-class instructional hours and mathematics achievement" (Beaton, et al., 1996, p. 16). Using both Programme for International Student Assessment (PISA) and TIMSS data, a "weak positive relationship or no statistically significant relationship between more time and improved scores" was found (Silva, 2007).

Balanced (Year-round) Calendars

According to the National Association of Year-Round Education (NAYRE), this model is designed to engage schools for twelve months of the year, with instructional programs being offered on a continuous, rather than nine- or ten-month basis, and shorter gaps between instructional sessions. The longer period of schooling is compensated with more frequent one- and two- week breaks, in addition to the ones found in traditional schools; as a result, the school year in a year-round school usually has a similar number of instructional days as other schools. Year round calendars are designed to achieve a better balance between time in school and vacation time, with the periods of time spent in school being of more equal length, and are sometimes called balanced calendars.

According to NAYRE, there were more than 2.3 million students enrolled in year-long schools during the 2002-2003 school year. The number has steadily grown when it is compared to the 1986-87 school year, in which 360,000 students were enrolled in year-round schools. There are 3,181 public schools that are on a year round schedule, compared to the 408 schools that ran year-round through 1986-1987. Of the 2.3 million students enrolled in year round schools, 60% attend schools in California.

Shields (1996) reports that, "although year-round schooling has been implemented to varying degrees in the U.S. for nearly 25 years, in Canada, the topic has predominantly been researched with very few implemented projects."

Only a handful of B.C. schools have balanced calendars, with three months of schooling followed by one month of holidays throughout the year (Vancouver Sun, April 27, 2012).

The Vancouver School Board (Hunter, 2010) offers a detailed description of a balanced school year, as follows:

> "A balanced school calendar, otherwise known as year-round schooling, is a way of configuring a school year calendar with an emphasis on an even distribution or balance of instructional days and school breaks over a period of twelve months. Although this schedule maintains the same instructional hours as a traditional school year, the breaks are distributed more evenly throughout the year. There are variations of schedules within the balanced school calendar and schools run on either a single-track or multi-track calendar. This report primarily focuses on the single-track calendar."

In February 2012, as the Vancouver School Board contemplated a move away from the standard calendar to a more balanced calendar, one that would see the summer vacation shortened and the needs of more vulnerable students better met. Superintendent Steve Cardwell was quoted in the Globe and Mail as saying he wants the change as a way to help students perform better academically. "The shorter breaks would benefit mainly ESL students, struggling learners and kids from vulnerable populations", he said. Also quoted was senior BCTF researcher Charlie Naylor, who spoke against the move, saying that the anticipated benefits 'have been a bit over-stated' and he expressed concern about a lack of 'clear, neutral evaluations.'

Edmonton Catholic Schools (http://www.ecsd.net/programs/yearround.html) has three schools that balance their years by dividing instructional days into four terms with vacation breaks between each of the terms. They offer a five-week summer break with students returning to school in early August – a two-week fall break in the middle of October – a two-week Christmas break that is the same as the rest of the schools – and a two week spring break in March. There are also two other days in the school year that are taken as extra-long long weekends – these vary year to year. The number of instructional days for students is exactly the same for both the year round calendar and the traditional calendar. Year round schooling gives parents in Edmonton Catholic Schools another choice for their children's education and reduces the concern of learning loss over a longer summer break. For more information about year round schooling please contact one of the schools listed below.

The Brampton Guardian (July 31, 2012) reports that two Peel County Board of Education Schools will follow balanced school calendars during the 2012-2013 school year. Roberta Bondar Public School offers a K-8 program, and has offered a balanced calendar since 2005; Ray Lawson Public School, which offers a K-5 program, introduced the balanced calendar this year. In these schools, students receive the same amount of instructional time as students in schools following a standard calendar, but approximately half of the typical summer vacation time is staggered throughout the year in one, two and three week blocks. During the 2012-2013 school year, it is reported these schools will have fall break from Oct. 1-12; winter break from Dec. 17 to Jan. 4; mid-winter break from Feb. 11 to 15; and spring break from March 11 to 22. The school year ends June 28.

Roberta Bondar Principal Joan Hamilton says, "With the shorter summer vacation, students typically return rested and ready to learn, and have not yet had time to become bored. We are happy to benefit from the continuous learning opportunities in the balanced calendar schedule and avoid the summer learning loss that can happen for some students."

Single- and Multi-track Approaches

Typically, a year-round schedule is implemented to break the summer holiday into smaller, redistributed units, and/or to reduce or eliminate the need to build, furnish and staff new schools. The most common models involve single-track and multi-track programs, identified by numbers, where the first number represents the days in a term, and the second the number of days in the inter-session, or vacation, as follows: 48-15; 65-20; and 95-30. Single-track programs see everyone on the same schedule; and multi-track programs see students on two or more staggered schedules so that, while some students are attending, others are on holiday. Multi-track programs are typically implemented in situations where over-crowding is a factor.

Explanations of the similarities and differences between single-track and multi-track calendars, together with seven examples of single-track and multi-track calendars, as implemented in schools in four American states can be found at http://www.nayre.org/cal.htm. They are quoted below:

> "Single-track provides a balanced calendar for a more continuous period of instruction. Students and all school personnel follow the same instructional and vacation schedule. Single-track does not reduce class size, nor does it allow a school to accommodate more students. The long summer vacation is shortened with additional vacation days distributed throughout the school year into periods called "intersessions". Intersessions allow time for remediation and enrichment throughout the school year. The most common types of single-track calendars are 45-15, 60-20 and 90-30."
>
> "Multi-track is used primarily to alleviate overcrowding, although it also incorporates the educational values of single-track YRE, including intersessions. It was designed specifically for schools with a shortage of classroom space. Multi-track is used to avoid double sessions, building new schools and temporary structures. It not only saves on capital construction costs, but on the ongoing costs that are part of operating a new school."
>
> "Multi-track divides students and teachers into groups, or tracks of approximately the same size. Each track is assigned its own schedule. Teachers and students assigned to a particular track follow the same schedule and are in school and on vacation at the same time. Multi-track creates a "school-within-a-school" concept. Example: implementing a four-track year-round calendar extends the capacity of a school by 33%. A school with the capacity of 750 students can accommodate 1,000 students, as only three tracks of 250 would be in school at the same time; there would always be one track on vacation or intersession every day of the school year. A five track model (60-15) allows for a 25% gain in capacity."

A single-track year-round calendar was implemented at Glendale Elementary School, in B.C.'s Caribou-Chilcotin SD #27, in 1991. This was done in response to a significant decline in student enrolment and with the belief that closer alignment of student holidays with lumber industry down times (particularly spring "break up") would positively affect enrolment, which it did.

In 1995, the Calgary Board of Education implemented a five-track (60-15) year-round school calendar at Terry Fox Junior High School, in response to student over-crowding. This was deemed successful in a number of aspects, and student achievement scores were found to have improved.

Effects of Year-round or Balanced Approaches

There is considerable debate over the effects of year-round schooling on student achievement with some researchers finding no effect (Goren, 1986; Hazelton, 1992; Zykowski, 1991); some finding positive effects (Baker, 1990; Bradford, 1993; Peletier, 1991; and Perry, 1991); and Quinlan and George (1987) reporting a negative effect. A small, four-year study undertaken by Ontario's Peel Board of Education at Roberta Bondar Public School found that Grade 7 math scores were positively affected when compared with a similar student demographic in a school following a standard calendar.

While past reviews of the research on year-round schooling are inconclusive (Merino 1983; Cooper et al. 2003), recent work by Graves (2010, 2011) indicates the year-round calendar may have detrimental effects on academic performance.

Von Hippel (2007), finding little benefit to year-round schooling argues that redistribution of learning time isn't in and of itself enough to mitigate learning loss says, "To truly see a difference, schools would have to increase the number of instructional days; currently most year-round schools simply redistribute the roughly 190 days of school all children attend." This argument that redistribution of learning time isn't enough unless coupled with an increase in the overall amount of learning time would be more likely to find support in the United States, where the school year is shorter than it is in Canada, and where there is a strong political argument being made for a longer school year

The Vancouver School Board's report on the pros and cons of balanced school years (compiled by Hunter, 2010) details the rationales behind, and the schedules of several Canadian schools following a single-track balanced school year calendar. There are opposing views on this topic, the report states, and both views must be considered when evaluating the balanced school calendar schedule. It summarizes those views as follows:

> "Advocates for a balanced calendar feel that many aspects of learning improve in a year-round schedule, including student attendance, attitude, and academic achievement, and that teachers have greater job satisfaction, as well. They state that teachers, students, and parents seem to like this system. To add to these benefits, the balanced calendar can be highly effective in reducing school operating costs. Opponents to the balanced calendar argue that there is no

substantial increase in academic student achievement when students are on a year-round schedule as opposed to a traditional schedule and that the research proposing the benefits of a balanced calendar is limited and inadequate. In addition, students, parents and caretakers must deal with schedule challenges and adaptation to change. Finally, cost saving claims are unsubstantiated."

History of the Four-day Week Calendar

The National Conference of State Legislatures (2013) cites others to explain that the four-day approach was first implemented as early as the 1930s (Donis-Keller and Silvernail, 2009), and became more common during the energy crisis of the 1970s (Ryan, 2009); that there are currently seventeen states (Darden, 2008) with 120 school districts operating on a four-day week (Donis-Keller and Silvernail, 2009); and that Georgia, Oklahoma, Washington are the most recent states to adopt legislation allowing four-day school weeks. Donis-Keller and Silvernail (2009) report that, in 2008, interest in this approach was growing, as evidenced by both daily news reports and the number of school superintendents nationwide, who were considering adoption of it.

The majority of districts utilizing a four-day week are usually small in population, and large in geographical size; they are rural and serve on average less than 1,000 students (Chamberlain & Plucker, 2003; NREL, 1997). The rationale for adopting a four-day week schedule, in both the United States and Canada, has been primarily economic in nature, in that it has focused on reducing transportation and energy costs, by reducing the school week from five days to four. Leiseth (2008) explains how the four-day week is structured to effect a cost saving by not operating on the fifth day.

Through the 1980s, Alberta's Fairview School Division No. 50 implemented a four-day school week program for Mennonite students, whose Friday attendance at their own 'German School' was honored and recorded by the district. This was done as a means of accommodating the Mennonite community; however, it had an economic benefit in that Mennonite students remained enrolled with the district. [This researcher was principal of that school from 1981-1985.]

In 1994, Alberta's Rocky View School Division launched a year-long pilot program that was cancelled in 1995, for reasons noted by CUPE in 2004. It reported that an external evaluation comparing learning results of students on a four-day week schedule against those of students on a five-day schedule found that, "achievement test results appear to indicate growth in learning is below rates expected for the period tested"; however, it further noted that two other studies of four-day week implementation in other districts, one in Ontario and the other in Saskatchewan, reported no detrimental effects on student achievement.

In 1996, seven schools in Saskatchewan's Scenic Valley School Division moved to a four-day week to save money by reducing transportation costs, and apply the savings to

improving instruction.

The Canadian Teachers' Federation (1996) provided an overview of the four-day week situation in both Canada and the United States, identifying districts that had either made the move or were considering doing so, and summarized relevant newspaper and journal articles.

CUPE (April 2003) stated that, "Very little information is available about how [the four-day week] affects student learning in the B.C. context", and notes that, "in BC as elsewhere, saving money has been the drive behind this reduced learning week."

The American Association of School Administrators had concurred with the latter point in 1999, when it reported on implementation of the four-day week in New Mexico: "There was nothing noble or high-minded about the birth of the four-day school week. It was driven by the need to save money."

Alberta's Parkland School Division rejected a proposal to move to a four-day week because of the "lack of evidence that academic achievement would be improved."

In British Columbia, the move to the four-day school week began in 2002, "after the government changed regulations governing the school year. Under the new rules, the year is measured in hours rather than days." (The Tyee, May 22, 2007; The Tyee.ca)

In British Columbia, the two longest-standing adherents to the four-day school week are Boundary School District No. 51 and Gulf Islands School District No. 64, both of which have nearly ten years experience with the practice. When Gulf Islands was considering the move to a four-day week, it researched Boundary's experience prior to making its decision to change. Boundary's experience has been well documented, with three research studies having been conducted by Owen in 2003, Chapman in 2004, and Rezansoff et al., in 2006-07.

British Columbia's centrally located Boundary School District No. 51 implemented a four-day school week in 2001/02 in response to "tough economic realities due to a number of circumstances mainly attributable to declining enrolment." (Rezansoff et al., 2007; p. 36) In 2002, the Boundary board was in a deficit position and was facing a possible closure of schools, which would have meant long bus rides for many students. The board moved to a four-day week, promising to conduct reviews one and five years later. The first review was conducted in 2002/03, and the second in, in two phases, was conducted in 2006/07.

Phase One involved an independent study of academic data and Phase Two a series of four publicized community forums backed by an opportunity to respond via email. The Phase One conclusion was that there was neither a positive nor a negative impact upon student achievement, as reflected in two standardized assessments (FSA and provincial exams); there had been some cost savings and efficiencies; reduced staff absenteeism; and a belief on the part of administrators that there were fewer student absenteeism and

discipline issues to deal with. Summarizing the findings of both phases, Rezansoff concluded:

> "In the end, we heard some of the same concerns that we heard in 2002. While some of these concerns are out of our control, others are ones that we can potentially address. …In the end, we heard that the four-day week is working well for our communities." (p. 2)

Some of the effects identified by Boundary, following implementation, included 'slightly increased student achievement levels, dramatically decreased student discipline problems, lower absenteeism amongst students and teachers, and financial savings'. By 2005, all district schools had remained open, the budget was balanced, and $100,000 per year was being turned back into programming.

In the years following implementation, Boundary 'closely tracked student achievement', tracking reading, writing and numeracy results for Grades 2, 4, 5, 6 and 8-12. In 2005, the superintendent reported that, "the large amounts of data collected indicated there was no decline in student achievement." While, he was reluctant to attribute "some slight boosts" in student achievement to the four-day week, saying, "these could be due to particular teachers and groups of kids", he did attribute a dramatic drop in discipline problems to shorter lunch periods, and he said that a dramatic reduction in teacher absences has resulted in a significant reduction in the number of teacher-on-call requests and, thus, considerable savings. Medical and dental appointments booked on Friday, and sports activities scheduled on Thursday evening and Friday meant that loss of instructional tome to these events was minimized.

Coast Mountain School District, facing the same dilemma as other interior districts, implemented the four-day week in 2003-2004, as a cost-saving measure. Despite a fourfold increase in per-pupil funding (from $1,716 per pupil in 2000-2001, to $7,932 in 2007-2008), the district found itself unable to operate a five-day week in the face of reduced revenues due to declining enrolment, steady infrastructural costs, rising salaries and inflationary pressures. (Tyee)

The final report of the 2004 study conducted by Malatest and Associates for Coast Mountain presented the results of surveys conducted after seven months of implementation. This 'snapshot' of the perceptions and degrees of satisfaction of parents, students and teachers still adjusting to the change presented 'varied opinions about the four-day week' and was largely inconclusive. In 2007-2008, the district committed to return to a 'normal' schedule as soon as possible. Although the move to a four-day week had resulted in budgetary savings in the range of 3-5% per year, 'the savings', it decided, 'hadn't been worth the costs'.

In the spring of 2004, the SD64 Board of Education found itself faced with a declining enrolment, a budget shortfall, and an inability to carry on as before. In March of that year, the Board initiated a series of consultation meetings in the district's school communities, in an effort to identify the best response possible under difficult circumstances.

With input from these meetings, and from its Futures 64 Task Force, the SD64 Board began to consider a move to a four-day school week as it's best option. Having had input from a district team sent to Boundary School District No. 51, the Board moved, in May, to implement a four-day school week. This was done according to provisions in the provincial School Calendar Regulation that allowed for local calendar modification.

Board members said that all the possible options had been studied in depth when the funding shortfall first precipitated a crisis. The four-day week was adopted in September 2004 as a way to avoid school closures and other program losses. (Driftwood Parents Seek New Look at the Four-day Week, Feb. 4, 2012)

A November 2005 SD64 survey indicated that, 'about 60% of teachers and parents liked the new schedule, and that the rate amongst students was somewhat higher.' Board Chair May McKenzie reported (in the May 19, 2005 BCSTA Education Leader magazine) that, 'playground supervisors indicate discipline reports are down, and student achievement may have risen slightly.' She further indicated that the district had not seen a drop in teacher and student absences, attributing this to increased illness due to the flu.

School District No. 64 has continued with the four-day calendar for eight years, and continues to hear questions concerning the effects of this approach to the organization of school time, on educational outcomes.

Effects of the Four-day Week Calendar

The four-day school week model has been, and continues to be controversial. This may be because it is an approach foreign to the experience of most people, who have experienced only a five-day approach; or because it is seen as a situation in which something (time and, therefore, learning opportunity) is taken away, denied, or lost.

This controversy may be either caused or fed by the fact that research findings are few, conflicting, possibly promotional, and because they offer little critical analysis of effects. As well, and as previously suggested, it may be fed by the belief that the standard school calendar has endured because it represents best practice.

The lack of conclusive research regarding benefits and drawbacks is noted by researchers themselves (Klump, 2013; Ryan, 2009; Donis-Keller and Silvernail, 2009; Darden, 2008 and others) as problematic.

Donis-Keller & Silvernail (2009) concur with Darden (2008), in noting the "limited systematic research on the impacts of this reform." They observe:

> "Despite over 35 years of implementation, few studies have documented the impact of the four-day school week. The impact of the four-day week is generally considered in four areas: (1) financial savings, (2) student achievement, (3) other student and teacher outcomes, and (4) stakeholder satisfaction. The most common means of identifying its success or failure are reports or evaluations conducted by districts themselves. As noted by many

observers, the literature that exists on the four-day school week is mainly positive, but not often peer-reviewed or scientifically-based, and few summaries of this literature provide any critical analysis of the results."

"Unfortunately", reports Klump (2013), "our review of the research found only a few evaluations, none of which included a control for variables, which makes it *impossible to know if apparent changes in achievement are a result of the schedule change or other factors."* [This researchers italics]

Districts who go to a four-day week out of financial necessity are more intent upon making ends meet than they are upon studying themselves in crisis, even though the data that they might otherwise gather would be of great use to themselves and others who resort to the same approach for similar reasons. "It has been out of practical (and often desperate) necessity", observe Donis-Keller and Silvernail, "rather than out of visionary efforts to raise the quality of education, that districts have gone to the shorter week."

While some districts adopt four-day approaches that preserve the total amount of instructional time offered under a standard calendar, some have adopted four-day approaches that involve a reduction of it. Recognizing that educational experts typically advocate for more instructional time, not less, Darden (2008) quotes Joyce Ley, then-director of a 2001 study by the Northwest Educational Laboratory in Portland, Oregon, who says of situations involving a reduction: "The four-day-week was probably one of those decisions made in education in the name of money that actually ended up having educational benefits in terms of the academic performance of kids. Schools end up operating more efficiently, and they can maintain their programs when their resources have been reduced." (p. 1)

Miller Hale (2007) focused on implementation processes and stakeholder perceptions in North Dakota school districts following a four-day week approach. With respect to student achievement, Miller Hale's findings lead her to observe (p. 104): "Achievement gains were demonstrated in some school districts" and that these "are connected to the quality of instructional time, not the four-day schedule." She concludes (on page 107) that, "research does not support the idea of any kind of scheduling alternative alone improving achievement. A study of high-performing schools should be done in terms of the quality of their instruction or how time is spent to share strategies and programs that produce results."

Leiseth (2008) found that the literature and the districts studied are aligned in showing that, "Morale, integrity of the core academic time, and the quality of family life or time are areas that show strong improvement" and she concludes that, "There is a place for four-day weeks in meeting the needs of their unique communities, based on the local school board decision and a community-based effort."

The work of Richards (1990) develops comparisons of student achievement in four-day and five-day week schools in rural New Mexico, and compares certain indicators of student and teacher satisfaction in four-day and five-day week schools, which are then

analyzed for correlation with the 1982-1989 Canadian Test of Basic Skills (CTBS) Battery Scores of Grade 5 and 8 student in 18 participating school districts. Richards found that achievement on these standardized tests was significantly higher overall for the students in four-day week schools, than for the students in the five-day week schools, and that it was marginally higher when student outcomes were compared on a grade by grade basis.

On balance, what research there is suggests, its limitations notwithstanding, that the four-day week approach is at the very least, a case of 'little or no harm done'. This being the case, care must be taken in assuming that conclusions arrived at in one context are directly transferable to other contexts.

Limited research done prior to 1999 found little or no impact (Reeves, 1999). Comparing eight years of test scores from four-day and five-day New Mexico districts in 1990, Richards (1990) found the mean score for student achievement among four-day schools was higher but not high enough to be considered statistically significant.

Donis-Keller and Silvernail survey a number of key studies (Daly and Richburg, 1984; Feaster, 2002; Koki, 2002; McCoy, 1983; Reinke, 1987; Sagnes and Saltzman; and Yarborough and Gilman) to conclude that, "Much of the literature on the practice concludes that a condensed schedule may have a positive effect, and in most cases has no negative impact." (p. 7)

Proponents argue that reducing the number of days that students attend classes may yield savings in transportation, facilities and personnel costs (Donis-Keller and Silvernail, 2009; p. 1). Beyond identified operational savings (Feldhausen, 1981), some researchers (Anton, 1995; Brubacher and Stiverson, 1985; Burgess, 1997; Richburg and Sjorgren, 1983; Pompano, 1981, Bauman, 1983, and Reinke, 1987) attribute educational benefits to the four-day week. Collateral benefits are said to include improved attendance on the part of students and staff, increased planning time for teachers, and reduced disciplinary problems (Owen, 2003; Chapman, 2004; Rezansoff et al., 2006-07; Darden, 2008).

Beesley and Anderson (2007), as cited by Klump (2013), discuss the issues regarding the four-day school week, based on a limited number of studies and anecdotal reports from teachers and students. The authors provide a useful table of pros and cons. Walker and Anderson (2012) considered evidence gathered from Colorado schools following a four-day school week, to answer the question, 'Does shortening the school week impact the performance of elementary students?' They observe that, hitherto, some schools have indicated that this policy eases financial pressures, but that it was not known whether the restructured schedule has an impact on student outcomes. Their results "suggest that student academic achievement has not been hurt by [this] change in schedule" and that, "the evidence indicates that the adoption a four-day school week shares a positive and often statistically significant relationship with performance in both reading and mathematics."

The work of Rice et al. (2002), Yarbrough and Gilman (2006), Durr (2003), Ronfledt et al. (2011), Chamberlain and Plucker (2003), Baltes et al. (1999) and others suggests

there are a host of variables that might positively affect student achievement in situations involving a changed weekly schedule.

The Colorado Department of Education provides an overview of districts in Colorado using the four-day school week schedule. It is primarily based on employee observations, interviews, and site visits. As of 2006, 34 percent of Colorado districts use the four-day schedule. "The districts schedule 7.5 hours per day for 144 days, instead of the normal six hours for 180 days." Most districts do not have school on Fridays. In general, practitioners feel that the overall impact on instruction is positive in that there are fewer disruptions to instructional time with this schedule. Although fatigue is a concern regarding younger students, no specifics are mentioned in the report. There is no data regarding student performance, as it is difficult to control for all variables involved in the impact on achievement. According to the study, "Few, if any, districts have changed from five to four days with the expressed purpose of improving student achievement."

Anecdotal evidence gathered by Toppo (2002), Kingsbury (2008) and Turner (2010) suggests that student attendance improves. Improved attendance is associated with better performance on standardized tests (Ehrenberg et al., 1991). It is reported that students are less distracted, exhibit improved morale, and behave better on the shortened weekly schedule (Koki 1992; Shoemaker 2002; Dam 2006; Donis-Keller and Silvernail 2009). Ryan (2009) suggests that students with long commutes might fare better on a schedule with fewer trips. Grau and Shaugnessy (1987) suggest that the shortened week, because it allows greater opportunity to schedule medical and other necessary appointments outside of school time, has the potential to reduce absenteeism and, thus, improve achievement; this may be particularly important for those who live in rural communities where long travel distances for appointments are common (Richberg and Sjogren 1983; Dam 2006).

While it is unclear whether the four-day week has reduced turnover, many school districts have reported fewer teacher absences after switching to the alternative schedule (Chamberlain and Plucker 2003). Lastly, a different effect could be that teachers are happy with the four-day weeks, and this leads to higher productivity while on the job. This would be in accordance with the literature from psychology on the relationship between the four-day workweek and employee satisfaction (Baltes et al. 1999).

A matter of concern in districts that move to a four-day week is potential loss of instructional time. Some districts address this by dividing the instructional time on the fifth day into four parts, and adding one part to each of the other four-days. Other time-preserving techniques include shortened lunch times, shortened or eliminated recesses, and reduced transition times between classes, and a calendar that ensures no loss of instructional time in weeks involving a statutory holidays.

The work of Bennett (2005) considered the impact of implementation of a four-day week upon teacher practice in School District No. 64. A particular finding was that, while teachers expressed concerned about the loss of instructional time, "no time had been lost to instruction because of the four-day week". Bennett found that some teachers had changed their practice, but that the change could not be directly attributed to the four-day week,

and recommended “future research to study the impact of reduced services and class size on teacher practice and student achievement.” (p. 67)

Other researchers suggest variables that might impact negatively upon student achievement. These difficulties faced by teachers needing to adjust their lesson plans to the change of schedule (Chamberlain and Plucker, 2003), teacher stress and fatigue (Sagness and Salzman, 1993), student difficulty in retaining information in the additional day off (Gaines, 2008), the need for extended focus and attention on the part of students, especially younger ones, dealing with a longer day. (Dam 2006; Gaines 2008; Ryan 2009)

Chris Herring, writing in the Wall Street Journal (March 8, 2010) noting the link between financial constraint, the consequent move to a four-day week and learning time, quotes a U.S. Department of Education spokesperson as saying, that, "Generally, we are concerned about financial constraints leading to a reduction in learning time."

The National Conference of State Legislatures (2013) reports that, “Educational experts worry longer weekends [resulting from the four-day week approach] could lead to a regression in learned concepts, while also making it more difficult to offer elective classes.”

Dr. Marcia Morris, a psychiatrist at the University of Florida Counseling and Wellness Center, outlines (in the Ocala, Florida Star-Banner of January 15, 2012) ways that a four-day school week “causes the most harm to the most children and concludes by evoking the Crosby, Stills and Nash song. “Nothing about the four-day school week”, she says, “teaches children well.”

Opponents argue that the compression of five days’ worth of learning time into four-days impacts negatively upon learning outcomes, and that savings incurred by following that model don’t compensate for what is lost otherwise. Donis-Keller and Silvernail (2009) conclude that districts using the schedule have support from the public, experience either no impact or a positive impact on academic performance, and incur some financial savings. However, they also caution that, "savings must be weighed against an increased length of the school day, child-care needs on the off-day, and professional development needs for teachers.” (p. 1)

Saskatchewan’s SSTA (1999) cites Anton (1995) to say, while “most, if not all, studies agreed that a four-day calendar had a positive impact on student achievement, reduced costs of operation, and improved student and staff attendance.” It goes on to caution that, “as with any organizational structure, there are weaknesses that accompany strengths”, and that, “care must be taken to examine the impact of the four-day calendar within the Canadian educational context”, recognizing that the four-day week is a primarily American phenomenon. There are relatively few schools in the United States following a four-day week calendar, and far fewer doing so in Canada. This being the case, care must be taken in trying to make sense of the Canadian experience, by looking at it through an American lens.

Summary Observations: Alternate Calendar Approaches

Calendars involving an increase in instructional time are typically in response to claims that more instructional time will result in greater student achievement. Those involving either a redistribution or reduction of time are often in response to either financial constraint, or an effort to mitigate summer learning loss. School over-crowding can be addressed by implementation of an extended or year-round calendar approach. Sometimes it is suggested, calendar approaches are selected and supported for 'lifestyle' reasons.

Under the new Bill 36, BC school districts have a duty to consult with constituents regarding the school calendar to be followed in a given year, or period of years. Some can be expected to take a more 'traditional' approach, and implement a calendar similar to the standard school calendar, and others to adopt an alternate calendar form. Most districts will likely proceed cautiously, recognizing that for most (those which have had no experience with the process of local calendar modification included in the legislation prior to Bill 36), a calendar consultation process is something new, and because they will recognize a need to some degree of coordination, at least regionally, in order to maintain the 'network benefits' experienced through standardized approach. The consultation processes undertaken should be authentic, and consistent with a philosophy of improvement.

Definitions of alternate calendar types are somewhat arbitrary, and individual non-standard school calendars can have characteristics of more than one model built into them. Each of the four basic alternate calendar types has benefits and drawbacks, and implementation and effects will look different from district to district, because contexts vary, district to district.

Overall, the research literature shows that where each of these approaches is concerned, the amount of time spent at school matters far less than the way that time is used, although the amount of learning time available matters more in the case of under-privileged students, consistent with findings related to summer learning loss. It suggests further that the extent to which students are actually engaged in learning, rather than the many peripheral activities associated with it in a school setting, affects their achievement.

Klump (2013) and others have shown that without controlling for the many variables that interplay with school learning time and student achievement it is "*impossible to know if apparent changes in achievement are a result of the schedule change or other factors."*

Appendix Four

The Relationship Between Time and Learning:
A Review of the Literature

TABLE OF CONTENTS

Appendix Four: The Relationship Between Time and Learning

The taproot of today's interest in the amount of schooling provided to American and, by extension, Canadian children can be found in three documents. "Interest in the length of the school day and year in the United States", states Copple (1992), "has been sparked by international comparative studies of academic achievement." The 1983 publication "A Nation At Risk", and subsequent reports explored the relationship between the amount of time students spend in school and their academic achievement, and an on-going public debate ensued.

"A Nation at Risk" included among its many findings a warning that the American 180-day school calendar had become outdated and could not sufficiently supply the kind of instructional time that American students needed in a world of increasing complexity. The report noted, among its many findings, that, "compared to other nations, American students spend much less time on school work." The report recommended that school districts and state legislatures strongly consider a 200-220 day school year.

Copple's (1992) work informed the National Education Commission on Time and Learning's 1994 study called "Prisoners of Time". The academic achievement of American public school students, relative to other industrialized countries gained heightened national attention with the passing of The No Child Left Behind Act of 2001, which revealed low educational outcomes nationwide, particularly in urban school districts. It is widely held that the country's poor showing came as a consequence of the relatively short American school year. This study suggests that spending more time in class may not be the best way to improve achievement and it recommends reformers "reinvent schools around learning, not time."

Leiseth (2008) cites Chaika (2005), and the North Carolina School Board Association (NCSBA) refers to the Trends in International Mathematics and Science Study (TIMSS) to describe a fundamental problem facing the American educational system: while the United States offers more years of formal education than many other industrialized nations, the length of its school year calendar is shorter than most of those nations, averaging about 180 days.

With a school year that is 30 days shorter than the 210-day average for high achieving nations, the Unites States finds itself facing considerable societal pressure to improve student achievement, as a means of ensuring that both students and the country can compete on a global level.

Van Beek (2009) comments on the decline in American reading outcomes reported in the 2008 National Assessment of Educational Progress, which occurred in spite of the lengthening over time of the American school year, and offers some perspective. He states that,

> "According to "Market Education: The Unknown History," by Andrew Coulson, in 1909-1910, the average American student spent 113 days in school. By 1969-1970 that average had climbed to 161 school days; today that number is

approaching 180 days. This means that the high school graduates of today are in class for what amounts to more than four additional school years – at the 180-day school year level – than graduates of 1910."

While the length of the American school year has increased over time, it is now being widely argued that it must be further lengthened, in the interest of improving educational outcomes. Pischke (2002) investigated how changing the length of the school year, whilst leaving the basic curriculum unchanged, affects learning and subsequent earnings. He observes:

> "While 52 percent of Americans advocate that children spend more time in school, there has been little change in the length of school terms during the last two decades. Interestingly, the 1994 study, "Prisoners of Time," while putting time in school at the center of their agenda, move somewhat away from simply adding instructional time to the use of that time for core academic activities."

Dr. Mark Philips, professor emeritus of secondary education at San Francisco State University recently observed, in July 16, 2011 Washington Post article called, "The 'Absurd' Debate About Length of School Year"):

> "…I've been looking at contradictory calls for a still longer school year, supposedly to increase achievement, and for a shorter school year, to save money. Both proposals seem absurd…. The research provides no compelling evidence that a longer school year improves student learning. Finland, a country with high achievement rates has just a few more instructional days [than the States]. The major variables differentiating us from Finland have nothing to do with instructional time."

He acknowledges concerns about the impact of a shorter school year on student learning before further observing:

> "None of these discussions look at the possible impacts upon families of a shorter school week or year. These actions shift the burden from the government to families who would then have to deal with the problem of childcare. ….I think these arguments miss the real problem of how we look at the relationship between learning and time. ….the primary question should be this: What is it that students need to learn in each subject and how can schools best increase this learning? The key variables in learning are student motivation and teacher skills. Neither are functions of the amount of time devoted to a subject."

Despite the suggestions put forth by "A Nation at Risk", the NCSBA observes that the amount of time which most American public school students spend in the classroom today remains exactly where it was in the early 1900s. O'Brien (2006) states that, "Widespread reforms that followed publication of the seminal 1983 report, "A Nation at Risk", have affected almost every aspect of teaching and learning except one: the school calendar.

Indeed, today's students attend school pretty much the same way their parents did, typically for 180 six-hour days from September to May." Although the report addressed the issue of time, and advocated for longer school days and a longer school year, and 37 states move to adopt them, she says, citing Aronson et al. (2005), "very few followed through given the exorbitant estimated costs for such changes."

Learning as a Function of Time

Carroll (1963) studied the impact of instructional time upon classroom learning, and concluded that learning is a function of time spent on task and the time a student needs to complete the task.

Frederick and Walberg (1980) group conceptions of time and learning under two broad points of view – acceleration and enrichment – and say that, in both cases, learning is thought to be a function of ability and time, other things being equal. Where enrichment is concerned, time remains constant for all students, and the normal curve of achievement is a function of the normal curve of ability. Where acceleration (as in mastery learning) is concerned, the authors draw on the instructional theories of Carrol (1963), Bloom (1976) and Harnishfeger and Wiley (1976) to explain that a fixed level of achievement (say 80%) is established and the amount of time given to achieve it is varied.

The work of Jez and Wassmer (2011) helps to identify the problem faced by those exploring the relationship between school time and student achievement; and establish if, and if so how, and if how, then to what degree learning is a function of time. These authors cite previous research (Borg, 1980; Brown & Saks, 1986; Cotton & Savard, 1981) that finds the more time students spend engaged in learning, the higher the expected levels of academic outcomes. They argue, however, "the relationship between just the amount of time allocated to learning and student academic outcomes – without controls for the effective the use of that time – remains unclear."

The theoretical and empirical importance of time is recognized from a variety of perspectives, even though its effects cannot always be precisely determined, because it is poorly measured or confounded with other variables (Frederick and Walberg, 1980). Frederick and Walberg review research that approaches learning in school and other settings as a function of time, or quantity of instruction. The studies they review are grouped according to the magnitude of time measure used: years of schooling; days of instruction; hours of classes; and minutes of study. These studies look at time as a dependent variable (where, for example, the amount of time devoted to study is a function of motivation), and an independent variable.

With respect to the effects of years of schooling, they conclude that there is a modest but persistent association between time and the outcomes measured. Where days of instruction are concerned, the studies reviewed showed that little association exists between the number of days spent learning and the achievement shown; or that there is a significant effect which, when the poverty variable is parceled out, is reduced. This would

suggest that, when taken with the findings of Pultke (2002), the amount of time for learning, whether increased or reduced, does impact disadvantaged students.

The author's analysis of studies concerned with the relationship between 'hours of classes' and achievement, led them to conclude that there is "a rather moderate but persistent" connection between time spent on content (whether in class or doing homework) and the achievement that results. They note that the unit of analysis, whether school or individual, seems to affect the strength of the time variable, and they suggest that homework time may be as predictive as in-class time in producing achievement effects.

The research studies reviewed reported modest relationships between time and achievement, when the focus was minutes of study. Overall, these authors conclude that school learning is produced in a context of many variables, time included, that work together to affect it. "Time devoted to school learning," they say, "appears to be a modest predictor of achievement."

The implication of these findings – that achievement increases with engagement; and that engagement increases when learning time is used well – suggests that the relationship between time and learning is a matter of not quantity of time only, but quality of time as well. The challenges for educators, if this is the case, is to not simply increase the amount of time available, but find ways of maximizing the amount of school time spent "on task" by students engaged in meaningful and motivating activities.

Hale (2007) states that, while "time can be an important variable" affecting educational outcomes, it is not the only variable, and any effort to adequately assess the effects of the way that time is organized on educational outcomes must somehow control for the other variables. Learning is produced in schools in a context of many variables that affect its effectiveness, and these variables are attributable to the student, his/her peer relationships, the instructional method, and the skills of the instructor. These variables may have their effects if, all things being equal, they are given time to work. While the amount of time devoted to school learning appears to be a modest predictor of school achievement, it may be the best predictor when other variables are experimentally or statistically controlled.

Types of School Time

In order to talk about the relationship between the way time is organized, and the effect that has upon student achievement, it is first necessary to differentiate between two basic kinds of school time: operational time and instructional time. The former includes all days in the school calendar, whether students are in session or not; the latter refers to that time, during those days when students are in session, when learning is scheduled to occur.

Black cites the work of Berliner (1990), Carrol (1963), Cotton, and Marzano (2000) to argue that most schools don't effectively organize and make use of time for learning, and states that, "Organizing the curriculum around time is a major design flaw." She comments that schools operate at too frantic a pace and should slow down; that a significant portion of the available learning time is lost to other activities; that schools should pay greater

attention to the amount of time that students actually spend in 'academic learning time'; and that students should be allowed 'fallow time' – 'time to explore and experiment –or just think-without pressure.' She distinguishes between four kinds of school time: allocated time; instructional time; engaged time; and academic learning time, and identifies five time-related factors that affect learning: aptitude, ability; perseverance, opportunity and quality of instruction.

O'Brien (2006), possibly influenced by Black, refers to meta-analyses conducted by Walberg (1998) and Aronson et al. (2005) to make further distinctions those authors make between different types of school time and their conclusions regarding the effect they have on student achievement. She describes three, rather than four types of time, as Black had done:

- **Allocated time** – the total number of days and hours students are required to attend school, including both instructional time and non-instructional time (e.g., time spent at recess, lunch, making transitions, attending assemblies and other non-classroom activities).

- **Engaged time** – the time when students are actually "engaged" in learning activities, which is much harder to quantify and document.

- **Academic learning time** – the "precise period when an instructional activity is perfectly aligned with a student's readiness and learning occurs."

O'Brien says, "it's not extra time that makes the difference, it's how the time is used," and summarizes the authors' analysis of the relationships:

- There is little to no relationship between allocated time and student achievement.

- There is some relationship between engaged time and achievement.

- There is a larger relationship between academic learning time and achievement.

School learning time is like a Russian doll, with 'academic learning time' subsumed within 'engaged time' which is, in turn, subsumed within 'allocated time'. Prensky in Bauerlein (2011; p.20) argues, as have Black and O'Brien, that the amount of time that students spend in 'engaged, academic learning time' is relatively small. He offers the following observation, before advocating for use of learning games during out of school time:

> "Elementary school, when you strip out the recesses and the lunch and the in-between times, actually consists of about three hours of instructional time in a typical nine to three day. So assuming, for example, that learning games were only 50% educational, if you could get kids to play them for six hours over a weekend, you'd effectively add a day a week to their schooling."

Wagner (2010) summarizes the findings of a University of Virginia study of more than 2,500 Grade 1, 3 and 5 classrooms: "Typically, over a 20-minute period, instruction involved only one method or mode, and teachers gave generic feedback on correctness rather than encouraging extension of student performance or encouraging alternate solutions…few opportunities were provided to learn in small groups, to improve analytical skills, or to interact extensively with teachers."

Schools come by their tendency to 'organize the curriculum around time' honestly, given that they were designed according to the same principles that gave us the industrial assembly line. While this may not have been 'a design flaw' in industrial times, O'Brien is not alone in thinking that the design has become more flawed as the needs and sensibilities of society served have shifted.

"Our Fundamental Error?"

Shulman (2010) refers to the work of Bloom and Carroll to argue that, "the greatest barrier to student achievement is the insane way in which we use time." Bloom (1968) argues that a "one size fits all" approach to the allocation of learning time will not result in mastery learning, and proposed an alternate approach involving varied lengths of instructional time, as one strategy lending itself towards both concept mastery, and correction for disparity in student capacity. Rather than treating time as fixed and success as variable – the usual formula in our educational system – Shulman believes we need to do the reverse. "Our fundamental error," he says," is that we treat time as a constant and permit achievement to vary and he argues, as Bloom did, that we must begin to treat achievement as a constant while we design time to be variable."

Acknowledging that correction of our 'fundamental error' involves more than simply turning things upside down (such that time becomes the variable and achievement the constant) and, arguing that Bloom's Mastery Learning falls short as a complete solution, Shulman offers the following:

> "We can't increase time without limits for all students and all subjects. And time alone cannot succeed without also improving the quality of instruction and student persistence. But I am suggesting that the most powerful approaches to learning, especially to the learning of students who have not been well served by the educational system and who therefore find themselves in "developmental" courses, means being willing to think differently about the relationship between time and achievement. And once you break the shackles of time, you will find yourself imagining ways to improve teaching, learning, student motivation and course design that can make a real difference."

Variables Affecting the Relationship Between Time and Learning

While it is true that the American school year is shorter than those in many other countries, and that the achievement of American students is lower than that of their

counterparts in other countries, it doesn't follow that there exists a direct, causal relationship between the two, and research suggests that student achievement is affected by other factors. While the focus and scope of this study does not allow for a detailed look at each, it should be understood that the relationship between time and achievement exists within a constellation of interacting variables.

The SSTA (1999) notes that several studies (Adelman, 1996; Mazzarella, 1984; Ellis, 1984; Rossmiller, 1983; Karweit, 1982) "have examined this relationship and have concluded there are many in-school and out-of-school factors that affect student achievement. The amount of instructional time needs to be researched as either a policy variable or a control variable, to estimate more precisely the effects of other educational variables such as the quality of instruction on student achievement. (Frederick and Walberg, 1980)

The Wisconsin Education Association Council organizes these into four very broad categories: the school; the family and the individual; social incentives; and socio-economic conditions. Rosenshine (1978) notes a shift in educational research from teachers' behaviors as related to student achievement gains, to other factors affecting such gain. This author reviews studies published since 1973, and summarizes some of the shifts noted. These include: (1) increased focus on student variables, (2) a convergence of results supporting "direct instruction", and (3) information on the relation between seatwork and discussion to gain in achievement. Seven variables reflecting management and organization of the classroom, and thus affecting achievement gain, are discussed: teacher role, student choice of activity, grouping, class management, seatwork, discussion, and atmosphere.

Extensive analysis of 50 years of studies and data as presented in the November 2004 issue of Educational Leadership magazine, entitled, "Closing Achievement Gaps" (www.ascd.org), concluded that 14 factors correlated with student achievement:

- Before and beyond school:
  - Birth weight
  - Lead poisoning
  - Hunger and nutrition
  - Reading to young children
  - Television watching
  - Parent availability
  - Student mobility
  - Parent participation

- In school:
  - Rigor of curriculum
  - Teacher experience and attendance
  - Teacher preparation
  - Class size
  - Technology-assisted instruction
  - School safety

A more comprehensive list of school variables that work together in combination to affect student achievement, assembled from a variety of sources, includes:

- School size
- Tracking or streaming
- Retention
- Class size
- The degree to which recognized best practices are followed
- Gender considerations
- Expectations held by teachers, parents and student themselves
- Peer influences
- Teacher education, credentials, experience and subject authorization
- Instructional methods
- Educational leadership
- Curriculum and instructional technologies
- Grade inflation
- Health
- School culture
- Socio-economics
- Student motivation
- Teacher training and experience
- Time: the amount, its distribution, and its use
- National and community values
- Attendance

Beyond these, there are the policy and political variables introduced by way of legislation. According to Wagner (2010), speaking from a decidedly American perspective, there's no solid evidence, based upon a review of the research to date, that either new state education laws intended to make public education more accountable, or the forces of free market competition as manifested in charter schools or vouchers, significantly improve educational outcomes.

Amount of Instructional Time

There is a substantial amount of research describing the pivotal role that learning time plays with respect to student learning outcomes. The American National Centre on Time and Learning identifies some key resources with respect to the relationship between time and learning theory, and time and student achievement (whilst advocating for a longer school year, particularly for the benefit of that nation's disadvantaged students).

Denham and Lieberman (1980) reviewed the Beginning Teacher Evaluation Study, which focused on the amount of time allocated to highly specific learning tasks, to conclude that increases in time allocated to these tasks did result in increased student achievement, contrary to what previous literature had claimed.

Having reviewed several studies on the relationship between time and educational outcomes, Frederick and Walberg (1980) group measures of learning time into four categories, based upon the magnitude of the time measure used: years of schooling, days of instruction, hours of classes and minutes of study. With respect to years of study, Frederick and Walberg conclude that various types of achievements – knowledge, intelligence, skills, cultural openness, religious commitment and language learning – are shown to be related to the amount of time spent in study, but were unable to say whether achievement increased with time. With respect to days of instruction, the authors conclude that days of instruction are more directly related to gains in achievement, rather than to absolute achievement level. Studies of the effects of hours of classes showed a moderate but persistent connection between time spent on content and the achievement that results. The authors report that studies that looked at time use during the school day reported modest relationships between the variable and achievement, and that the strength of the relationship increased when the measure of time was refined to reflect actual time devoted to the outcome being measured.

Karweit (1983) reviewed then-existing studies on the way time is used in school, focusing on the reasons behind the variations observed, and the impacts upon student achievement. Gettinger (1984) worked with Grade 4 and 5 students to investigated the difference between time *spent in learning (TSL)* and time *needed for learning (TTL),* and drew on the work of Carroll to postulate that the degree to which learning takes place is a function of the ratio of TSL to TTL. She found that both the degree of initial learning and the one-week retention of knowledge dropped significantly when children spent less time than was needed to learn an experimental task.

Marcotte (2007) establishes a link between student achievement and the impact of a school year shortened due to inclement weather to conclude that, in schools with an average number of school closures days (5), the percentage of third grade students performing satisfactorily was 3 percent lower than in years with no school closures.

Jez and Wassmer (2011) state that, “While conventional wisdom may expect a positive relationship between additional hours in the classroom and higher standardized test scores, the scholarly evidence from empirical research on this subject is relatively thin.”

Dobie and Fryer (2011) identified elements within New York City charter schools that had the greatest impact upon academic outcomes. They found that traditional measures like teacher credentials and teacher class size correlated only weakly with student achievement, whereas instructional time – measured as the time students actually spent engaged in learning – and direct instruction were much stronger predictors of higher achievement. Hoxby and Murarka (2008) discovered that charter school students who attended schools with a longer school year (usually associated with a longer day) performed better than students in schools with years of a more conventional length.

Pischke (2002) says that instructional time matters differently for different people and that, his conclusion aside, there were some students who suffered as a result of the shortened year; they were unable to keep pace with the increased pace implied by the shortened year. His findings are consistent with other literature and, together, these are not encouraging for policy makers who wish to use lengthening the school year as a measure to boost the performance of their students. The enthusiasm of the authors of a "Nation at Risk" for longer school years, and the arguments that build on it may be misguided and misplaced.

Hodges and Cuddeback (2010) investigated the impact on academic outcomes in situations where students were released from school during the school day, to participate in programs not offered by their schools. Release time programs allow public school students to be excused from classes to receive off-site religious or moral education. In large part due to the federal No Child Left Behind legislation, schools are under increasing pressure to raise test scores. Consequently, some observers have questioned release time programs based on the assumption that missed instructional time results in lower test scores.

The authors' findings "refute the assumption that release-time participation will adversely affect student achievement" and they claim, "Indeed, at a minimum, excusing students to attend release time classes does not appear to affect academic outcomes." (p. 63)

Venable (2011) writing about the return on investment in higher education, states that that time is part of the investment, especially from students' perspectives, and she says that program length and flexible pacing are among factors affecting enrolment decisions. She distinguishes between learning as an outcome versus learning as a process, commenting on the increasing pace at which educational programs are delivered and completed, acknowledging that time and money can be saved by both institutions and students, and refers to the work of Clark Quinn who, in 2006, introduced the idea of a "Slow Learning Movement" and advocates for the use of technology matched to the way our brains work.

Across America, state departments of education, local school districts and the public are debating whether extending the school day and/or the school year will accomplish this, and whether they can afford to do so, recognizing that any lengthening of the school day or the school year will have significant budgetary implications.

The idea that lengthening the school year doesn't necessarily translate into improved educational outcomes, and that the latter are more likely attributable to other factors, is well documented. Piscke, for example, has argued that the superior educational achievement of students in other nations, with their longer school years, may not be due to time spent in school, but instead to the value placed upon education in those countries' urban school communities.

Copple (1992) concludes, “A host of cultural differences among countries as well as differences in student motivation and pedagogical differences from one country to another, appear to influence achievement as well, and make interpretation of cross-national data a complex enterprise that eludes simple answers.” Acknowledging that, “the determination of the length of the school year and day is not a simple task” (p. 18), she presents then-current data gathered from two non-governmental, international research consortia: the International Association for the Evaluation of Educational Achievement (1987), and the International Assessment of Educational Progress (1991). Looking for a causal relationship between lengths of school day and school year upon student achievement, she concludes, “…international data on the length of the school day and year seem to suggest that increasing instructional time should result in higher achievement”, but she qualifies this by saying that the evidence presents “a very different picture when hours of instruction and achievement are examined by subject area.” (p. 20)

Copple observes that, where math is concerned, some of the countries with the highest achievement devote the least amount of time to math instruction; for example, where first raking Japan devoted 101 hours to math instruction, fifth ranking Canada (B.C.) devoted 120, and the fourteenth ranking United States devoted 144. One would think that devoting 40% more time to math than Japan should mean that the United States would achieve higher student results, if there were a direct, causal relationship between instructional time and outcomes.

The fact that, while American students receive more instruction in math than their Organization for Economic Cooperation and Development (OECD) counterparts, but perform more poorly than most of them raises a question: Why would a country operating on a relatively short year devote such a relatively large portion of instructional time to math? The answer appears to be that, because it measures its success largely on the basis of its students’ results in standardized math tests, it devotes as much time to math instruction as it can.

Van Beek (2009) compares the number of days a Michigan school district is in session and its performance in the Michigan Educational Assessment Program (MEAP), finding that there is no statistical relationship between the length of time a school is in session and student performance. He reports that, “In fact, during the 2007-2008 school year, the 20 districts in Michigan with the lowest average MEAP scores averaged 30 more hours of instructional time than the 20 districts with the highest average MEAP scores. Looking at other measures of success produces similar results. For instance, high schools with more days on their school calendar do not produce higher graduation rates than those with fewer days. He concurs with Silva, saying, “Instead of focusing on the amount of time in class, we should focus on the quality of the time in class.”

Stoops (2007) argues that simply adding hours to the school calendar does not increase academic performance. Having examined public school math scores in OECD nations, Stoops found that although America’s school year is the shortest, the amount of time it devotes to math instruction is significantly greater than that most of the other countries considered; only two of the five highest-performing countries offered more math instruction each week and each year than the average U.S. school. Even with the shorter

school year, he observes, “American students receive the equivalent of four more weeks of math instruction than students in the average nation linked to the Organization for Economic Cooperation and Development. But U.S. students’ standardized math test scores rank 27th out of 39 OECD countries.” If, in the case of a specific subject area, more instructional time doesn’t translate directly into better outcomes, then, it shouldn’t follow that more instructional time overall will translate into better results overall. Arguments for extended school days and years “promote facile solutions to complex problems”, Stoops observes.

Copple et al. (1992) and Silva (2007) argue that that, “The relationship between instructional time and achievement is far more complex than it appears at first glance”, and that, “the research reveals a complicated relationship between time and learning that suggests improving the quality of instructional time is at least as important as increasing the quantity of time in school.” The idea that educational outcomes are dependent at least as much on the quality of inputs, as on the quantity of inputs is one that deserves much greater attention.

Richards (1990) reports that some of the districts in his study report that, “the four-day week actually increases the amount of time spent on instruction”, and he suggests that, “a study on the length of instructional time and interruptions into instructional time in four-day week schools would be a worthy pursuit.” (p. 124)

Wagner (2010) observes that, “the longer our children spend in school, the less curious they become” and that, consequently, “boredom continues to be a leading cause of our high school dropout rate.” He references a study by the “non-partisan” Centre on Educational Policy, which found that among districts that reported an increase in instructional time devoted to ‘the basics’, “the increase since 2001-2002 was substantial, amounting to a 46 percent increase in ELA [English Language Arts], a 37 percent increase in math, and a 42 percent increase across the two subjects combined.” (p. 70). He points to a corresponding decline in the average amounts of time devoted to other subjects, saying, “These decreases represent an average reduction of 31 percent in the total instructional time devoted to these subjects since 2001-2002.”

This trend, which he sees as a consequence of the No Child Left Behind law, shows that, “the curriculum in both elementary and secondary schools all across the country is being limited to only what’s being tested. There is only one curriculum in American public schools today: test prep.”

Quantity Versus Quality

In order to determine in what ways and to what degree time affects student achievement, it’s necessary to distinguish between the quantity of time devoted to learning, and the quality of time; to consider the ways that other factors affecting student achievement affect and are affected by the quality and quantity of that time. It’s also necessary to consider the relative importance placed on quantity and quality: is one given precedence over the other, or are they regarded as being equally important?

Wiley and Harnischfeger 's 1974 inquiry into the debate concerning quantity versus quality of education drew on previous research to produce evidence that schooling has a large, important effect upon achievement, and proposed an instructional model that highlights varying lengths of instructional time based upon individual needs. Hobsinger (1982), Gardner (1983), and Karweit (1985), have explored the relationship between time and learning.

Mazzerella (1984), Ellis (1985), Adelman (1996), Aronson (1995) and Peyton (1995) draw distinctions between the quantity of time allocated to instruction and the quality of the time actually devoted to it. While the relationship of both quantity and quality of time to student achievement is complex, these studies recognize that time and particularly 'engaged time' is an important factor in student achievement and, for this reason, Rossmiller (1981) identifies the key role that school administrators striving to ensure that instructional time is preserved and opportunities for student engagement are maximized, play in improving student achievement.

Rowe and Rowe (2002), focusing on gender issues in education, conclude that, "differential gender effects pale into relative insignificance compared with class/teacher effects", and that, "what matters most is quality teaching, supported by strategic teacher professional development!" Marzano (2003) writes that 'research suggests the quality of instructional time is a major influence in student achievement, and Leiseth (2008), concurs, saying that, "When combined with good teaching and effective school and student management, time has been determined to be a significant component of student achievement."

Chenoweth (2007) examines a variety of schools where students are matched socio-economically, to identify the thoughtful use of instructional time as a key factor in student success.

Patall et al. (2009) reviewed 15 research studies conducted during the period 1985-2009, which investigated the relationship between extended school time and academic achievement. She notes that designs are generally weak for making causal inferences; that outcomes other than achievement are scarcely studied; and that findings suggest extending school time can be an effective way to support student learning, particularly for students most at risk of school failure, and when considerations are made for how time is used. She concludes, "Any positive relation between allocated time and achievement is tentative and instructional quality needs to be addressed first."

Summary Observations: The Relationship Between Time and Learning

The literature reviewed shows that the relationship between instructional time and student achievement is far more complex than it appears at first glance, and reinforces the researcher's growing realization that the research question posed is largely unanswerable in the local context. Research shows that the challenges involved in exploring the relationship between time and learning are considerable. While the theoretical and empirical importance of time is widely recognized, its effects on learning are difficult to

determine. This is because of the challenges associated with isolating the relationship from the constellation of variables within which it exists, and with which it interacts.

The literature shows that, in the face of growing concern that schools might not be doing a good enough job of preparing students for life beyond school, and evidence drawn from national and international comparisons of student achievement that feeds that concern, American policy makers are looking to increase the time devoted to schooling and learning. An unfortunate consequence of this is a narrowing of the curriculum and an increased emphasis upon teaching directed at tests.

Although the length of the school year has increased from around 113 days to 180 days over the past 100 years, there has been a leveling off in the last two decades, and this can be attributed, in fair measure, to the costs associated with further increase.

The idea that lengthening the school year doesn't necessarily translate into improved educational outcomes, and that the latter are more likely attributable to other factors, is well documented. While the amount of time devoted to learning may be 'the best, but modest' predictor of student achievement, this is the case only when the other variables are statistically or experimentally controlled.

The literature suggests that concern for the amount of time devoted to learning might be better directed at ensuring that the time available is put to effective and efficient use, such that it becomes 'quality' time. It distinguishes between different types of school learning time, and suggests that the amount of allocated time within which students are fully engaged and learning is relatively small, and that greater attention should be paid to increasing both the quantity and quality of learning time, within the amount of time already allocated. This would be a particularly important consideration in situations where a shortened year is being contemplated. Where a longer year is being contemplated, simply adding hours or days should not be expected to increase academic performance.

The literature suggests that society has committed a "fundamental error" by designing schools the way it designed industrial assembly lines, such that time was maintained as a constant and the quality of the product treated as a variable. In an educational context, it is argued, the expectation that students will achieve at a particular level should be the constant, and that the amount of time each student needs to meet the expectation should be varied according to need.

The literature points to the fact that, as Richards (1990) suggests, we don't know enough about the relationship between time and learning, as it exists in our local context, where the variables that come into play and the way that they do it, are specific to our experience, and not the experience of others elsewhere. It further suggests that careful examination of the way that its schools deploy the amount of time currently allocated to learning, in the interest of ensuring that students' 'engaged academic learning time' is maximized, would be beneficial.

While the amount of time allocated to student learning may be a 'modest' predictor of student achievement when other variables aren't controlled, it may, nonetheless, be the 'best' predictor, in situations where those other variables are surfaced, considered, and

controlled, to the greatest extent possible. Establishing and maintaining high expectations for student achievement, and varying the amount of time made available for learning according to student need would recognize what we know to be true, but don't always honor: 'students learn in a variety of ways and at different rates.' Paying greater attention to the way that the time allocated for learning is actually used – to the quality of that time – and, within that, increasing the amount of time when students are fully engaged in learning, would go a long way towards ensuring improved academic achievement.

While 'extending school time can be an effective way to support student learning', particularly for students most at risk of school failure, it doesn't follow that the answer lies, simply, in adding more hours to those already available. As Patall et al. conclude, "Any positive relationship between allocated time and achievement is tentative, and instructional quality needs to be addressed first."

Appendix Five: Literature Review References

Alexander, K., Entwisle, D., and Olson, L. 2007. Summer learning and its implications: Insights from the Beginning School Study. In R. Fairchild, & G. Noam Eds., "Summertime: Confronting Risks, Exploring Solutions" pp. 33-43. San Francisco: Jossey-Bass/Wiley.

Alexander, K., Entwisle, D., and Olson, L. (2007). Lasting consequences of the summer learning gap. American Sociological Review, 72, 167-180.

Alexander, Karl, Entwisle, D., and Olson, Linda. (2004). "Schools, Achievement, and Inequality: A Seasonal Perspective." In Geoffrey Borman and Matthew Boulay Eds., Summer learning research, policies, and programs pp. 25-51. Mahwah, N.J.: L. Erlbaum Associates.

Bauerlein, Mark, Ed., The Digital Divide: Arguments for and Against Facebook, Google, Texting and the Age of Social Networking. New York: Penguin. 2011

Beesley, A.D., & Anderson, C. (2007). The four-day school week: Information and recommendations. The Rural Educator, 29(10), 48–55.

Benevot, Aaron and Massimo Amadio. (2004). "A Global Study of Intended Instructional Time and Official School Curricula, 1980-2000." Background paper commissioned by the International Bureau of Education for the UNESCO – EFA Global Monitoring Report (2005): The Quality Imperative. Geneva: IBE.

Bennett, Richard. (2005). A Case Study on the Impact of the Four-Day Week on Classroom Practice. Royal Roads University.

Berg, B. L. (2004). Qualitative research methods for the social sciences (5th ed.). Long Beach, CA: Pearson Education.

Berliner, David. (1990). "What's All the Fuss About Instructional Time?" in The Nature of Time in Schools. New York: Teachers College Press.

Berliner, David (2002). Educational Research: The Hardest Science of Them All. American Educational Research Association.

Berliner, David. (2002) Educational Research: The Hardest Science of Them All. Educational Researcher Volume 31, No. 8 , pp. 18-20. November 2002.

Bickford, Rebekah and David L. Silvernail. (2009). Extended School Year Fast Facts. Center for Education Policy, Applied Research and Evaluation University of Southern Maine.

Black, Susan. Time for Learning.

Bloom, BS (1968). Learning for Mastery. As found in C.W. Fisher and D.C. Berliner (Eds.) (1985). Perspectives on Instructional Time (pp. 73-93). New York and London: Longmans.

Canadian Union of Public Employees. (2003). CUPE Research: A Review of the Four-Day School Week.

Carr, Michelle. (2000). Looking Through Hourglass: A Case Study of Vickery Elementary School. Unpublished graduate seminar project, University of Maine.

Carroll, JA (1963). A Model for School Learning. Teachers College record, 64: 723-733.

Chamberlain, M. & Plucker, J. (2003). The Four-Day School Week. Education Policy Briefs, Vol. 1, No. 2, Winter 2003.

Chapman, Bob. (2004). The Four-Day School Week: A Program Review of the Boundary School District. University of Calgary.

Colorado Department of Education. (2003). The 4-Day School Week. Denver, Colorado.

Colorado Department of Education (2006). The 4-day school week. Denver, CO: from http://www.cde.state.co.us/cdeedserv/download/pdf/4dayweek06.pdf.

Cooper, H., Nye, B., Charlton, K., Lindsay, J., & Greathouse, S. (1996). The effects of summer vacation on achievement test scores: A narrative and meta-analytic review. Review of Educational Research, 66, 227-268.

Cooper, Harris. (2003). Summer Learning Loss: The Problem and Some Solutions. http://www.colorincolorado.org/article/8057/

Copple, Carol et al. (1992) Briefing Paper. The National Education Commission on Time and Learning. Pelavin Associates, Inc., Washington, DC.

Cotton, Kathleen. (2006). "Educational Time Factors." School Improvement Research Series, Northwest Regional Educational Laboratory.

Coulter, D. & Wiens, J. (2002) Educational Judgment: Linking the actor and the spectator. Educational Researcher, 31(4), 15-25.

Darden, Edwin C. (2008). The Four-day week: A Fuel's Paradise in Forecast: Emerging Issues in Public Education. Vol. 6, Issue 3.

Davis, Wade. (2009) The Wayfinders: Why Ancient Wisdom Matters in the Modern World. House of Anansi Press. Toronto.

Dobie, W. and Fryer, R Jr. (2011). Getting Beneath the Veil of Effective Schools: Evidence from New York City NBER working paper, No. 17632.

Donis-Keller, C., & Silvernail, D.L. (2009). Research brief: A review of the evidence on the four-day school week. Portland, ME: Center for Education Policy, Applied Research and Evaluation, University of Southern Maine. Retrieved October 15, 2009, from: http://usm.maine.edu/cepare/pdf/CEPARE%20Brief%20on%20the%204day%20school%20week%202.10.pdf.

Downey, D., von Hippel, P., & Broh, B. (2004). "Are Schools the Great Equalizer? Cognitive Inequality during the Summer Months and the School Year." American Sociological Review, 69 5, 613-635.

Duffet, Ann et.al. (2007). "All Work and No Play: Listening to What Kids and Parents Really Want from Out-of-School Time," Washington, DC: Public Agenda.

Entwisle, D., Alexander, K., & Olson, L. (2000). "Summer Learning and Home Environment." In R. Kahlenberg Ed., A Notion at Risk: Preserving Public Education as an Engine for Social Mobility pp. 9-30. New York: Century Foundation Press.

Fischel, William A. (2003). "Will I See You In September?": An Economic Explanation for the Summer Vacation, Dartmouth College Economics Department Working Paper 03-03.

Fischel, William A., Will I See You in September: An Economic Explanation for the Summer Vacation, a Dartmouth College Economics Department Working Paper, January 2003: http://www.scribd.com/doc/20713416/Agrarian-Calendar-No

Fredrick, W.C.; Walberg, H.J. (1980). Learning as a function of time. Journal of educational research (Washington, DC), vol. 73, p. 183-94.

Garner, Joe. (1980) Never Fly Over An Eagle's Nest. Oolichan Books, Lantzville, BC.

Gettinger, Maribeth (1984). Achievement as a Function of Time Spent in Learning and Time Needed for Learning. The American Educational research Journal. Sept 21, 1984 vol 21 no 3, pages 617-628.

Gold, K. (2002). School's In: A History of Summer Education in American Public Schools. Peter Lang Publishing.

Gold, K. (1997). "Mitigating Mental and Moral Stagnation": Summer Education and American Public Schools, 1840-1990. PhD Dissertation (History), University of Michigan.

Hansard: Official Report of the Debates of the Legislative Assembly, Volume 36, Number 3: May 1, 2012. Page 11315.

Heyns, Barbara. (1978). “Summer Learning and the Effects of Schooling”. Orlando, FL: Academic Press.

Hodge, David R. and Gary S. Cuddeback , ‘Release Time and Academic Outcomes: Does Releasing Students for Religious or Moral Education Negatively Affect Test Scores?’ Journal of the Society for Social Work and Research. September 2010 Volume 1, Issue 1, 56–65. Arizona State University, University of North Carolina at Chapel Hill.

Hoxby, C and Murarka, S. New York City Charter Schools: How Well Are They Are Teaching Their Students? Education Next, Summer 2008: 54-61.

Jez, S.J. and Wassmer, R.W. (2011) The Impact of Learning Time on Academic Achievement. Prepared for the Faculty Fellows Research Program Center for California Studies. California State University.

Karweit, N.L. (1983). Time on Task: A Research Review. Report No. 332. Baltimore, MD: Johns Hopkins University. Centre for Social Organization of Schools.

Klump, Jennifer. (2013). What the research Says (and Doesn’t Say): The Four-Day Week. Education Northwest Magazine.

Kohn, Alfie. http://www.huffingtonpost.com/alfie-kohn/lowering-the-temperature-_b_1688255.html

L’Encyclopédie de l’histoire du Québec / The Quebec History Encyclopedia: Elementary School education in Canada. Citing W. Stewart WALLACE, ed., *The Encyclopedia of Canada*, Vol. IV, Toronto, University Associates of Canada, 1948, 411p., pp. 265-270.
http://faculty.marianopolis.edu/c.belanger/quebechistory/encyclopedi/ElementarySchooleducationinCanada.htm

Liebowitz, Stanley J., and Stephen E. Margolis. “Network Externality: An Uncommon Tragedy.” Journal of Economic Perspectives 8:2 (Spring 1994): 133-150.

Malatest and Associates, Ltd. (2004). Coast Mountain School District #82: 4-Day School Week Survey Results (Final Report). Prepared for School District #82.

Marcotte, DE (2007). Unscheduled school closings and student performance (IZA Discussion Paper 2923. Bonn, Germany: The Institute for the Study of labor.

Marzano, Robert. (2000). "Optimizing Teachers' Use of Instructional Time" in A New Era of School Reform: Going Where the Research Takes Us. Aurora, Colo.: Mid-Continent Research for Education and Learning.

Mclaughlin, Brenda and Smink, Jeffrey. Why Summer learning Deserves a Front-Row Seat in the Education Reform Arena. The Johns Hopkins University New Horizons for Learning. http://education.jhu.edu/PD/newhorizons/Journals/spring2010/why-summer-learning/

Miller, Beth M. (2007)The Learning Season: The Untapped Power of Summer to Advance Student Achievement. The Nellie Mae Foundation, Quincy, Mass.

Miller Hale, Rebecca Mae. A Case Study of the Four-day week in Five Dakota Pre-Kindergarten-12 Public Schools. The University of South Dakota, 2007.

Minnesota Elementary School Principals' Association. http://www.mespa.net/Bridging_the_Gaps_May_2011.html

Neal, R.G., Extended School Day and Year Are Under Review Across the Country. The Heartland Institute: http://news.heartland.org/newspaper-article/2008/02/01/extended-school-day-and-year-are-under-review-across-country

O'Brien, Eileen M. (2006). Making Time: What Research Says About Re-organizing School Timetables. The Centre for Public Education.

Olsen, Darcy Ann. (2000). Cancelling Summer Vacation, The Cato Institute, (citing The Washington Times June 20th, 2000).

Owen, Marne. (2003). Four-Day School Week: Boundary District #51. M. Ed. Exit Paper. University of Calgary.

Palys, T. (2003). Research decisions: Quantitative and qualitative perspectives. Scarborough: Nelson.

Patall, Erika, H. Cooper and Ashley Batts Allen. 2009. Extending the School Day or School Year: A Systematic Review of Research (1985–2009) University of Texas at Austin and Duke University.

Rakoff, Todd D. (2002). A Time for Every Purpose: Law and the Balance of Life. Cambridge, Mass.: Harvard University Press.

Rezansoff, Teresa, et al. (2007) Review of the Four-day School Week: Conducted by the Board of Trustees of School District No. 51 (Boundary).

Richards, R.L. (1990). A Comparative Study Using Selected Characteristics of Four-Day Week Schools and Five-Day Week Schools In Rural New Mexico. Doctoral Dissertation submitted to the Graduate Faculty of Texas Tech University.

Rosenshine, Victor, Barak. 1978. Academic Engaged Time, Content Covered, and Direct Instruction.

Rowe, Kathy and Ken Rowe. (2002). What Matters Most: Evidence-Based Findings of Key Factors Affecting the Educational Experiences and Outcomes for Girls and Boys Throughout Their Primary and Secondary Schooling. Invited supplementary submission to House of Representatives Standing Committee on Education and Training: Inquiry Into the Education of Boys (MIMEO).
See also: http://www.aph.gov.au/house/committee/edt/eofb/index.htm

Ryan, Molly (2009) State Notes: Scheduling/School calendar/Week. The Education Commission of the States (www.ecs.org).

Schell, Al and Penner, Glen. (1993). Rescheduling the Traditional School Day and Year. Saskatchewan School Trustees Association Research Centre Report #93-08.

Sankar, Deepa: Teacher's Time On Task: Quantity and Nature of Tasks. SASHD, The World Bank New Delhi.

Saskatchewan School Trustees Association. (1993). Alternate School Year Organizations. SSTA Research Centre Report #99-08.

Shulman, Lee S. (2010). It's All About Time. The Carnegie Foundation for the Advancement of Teaching. Print 3967 (http://www.carnegiefoundation.org).

Sloan McCombs, J. et al. (2011). Making Summer Count: How Summer Programs can Boost Student Learning, The Rand Corporation.

Stoops, Terry R. Better Instruction, Not More Time. Carolina Journal Online, August 2, 2007: http://www.carolinajournal.com/articles/display_story.html?id=4219.

Stoops, Terry R. in http://nces.ed.gov/surveys/pss/tables/table_2004_06.asp.

Strauss, Valerie. The Absurd Debate About Length of School Year, featuring Dr. Mark Phillips. The Washington Post. July 16th, 2011.

Suhrcke, Marc and Carmen de Paz Nieves. (2010). Background draft prepared for the International Conference on Education, Social Capital and Health in Oslo , Norway.

The Canada Council on Learning. Summer Learning Loss. June 12, 2008.

Van Beek, Michael. (2009) Longer School Year Won't Improve Student Achievement. Mackinac Centre for Public Policy; Viewpoint on Public Issues. http://www.mackinac.org/10840

Venable, Melissa. (2011). Learning as a Function of Time. Originally posted on Inside On-line Learning.

Von Hippel, P.T. et.al. (2007). "The Effect of School on Overweight Children: Gain in Body Mass Index During the School Year and Summer Vacation."

Wagner, Tony. (2010). The Global Achievement Gap: Why Even Our Best Schools Don't Teach the New Survival Skills Our Children Need – And What We Can Do About It. New York: Basic Books.

Warner, Erica. (2010). Obama: School Year Should Be Longer. Huffington Post: Politics: Canada.

Wiley, D and Harnischfeger, A. (1974). Explosion of a Myth: Quantity of Schooling and exposure to Instruction: Major Educational Vehicles. Educational Researcher, 3, 7-12

Zakaria, Fareed. (2012). The Post-American World: Release 2.0. New York: W.W. Norton.

Additional Web-based References

http://www.bced.gov.bc.ca/reports/pdfs/transition/prov.pdf

http://www.bced.gov.bc.ca/assessment/nat_int_assess.htm

http://www.bced.gov.bc.ca/reports/pdfs/fsa/prov.pdf

http://www.bramptonguardian.com/community/education/article/1434460

http://www.colorincolorado.org/article/8057/

http://www.centerforpubliceducation.org/Main-Menu/Organizing-a-school/Time-in-school-How-does-the-US-compare

http://www.education.gov.uk/schools/adminandfinance/schooladmin/schoolyear/a0064221/length-of-school-dayyear

http://education.nationaljournal.com/2012/07/summer-learning.php

http://www.huffingtonpost.com/2010/09/28/obama-school-year-should-_n_741338.html

http://www.education.gov.uk/schools/adminandfinance/schooladmin/schoolyear/a0064221/length-of-school-dayyear

http://www.theglobeandmail.com/news/british-columbia/bc-school-boards-handed-control-over-calendars/article4102910/

http://www.theglobeandmail.com/news/national/time-to-lead/does-year-round-schooling-make-the-grade/article4261901/

http://www.mespa.net/Bridging_the_Gaps_May_2011.html

http://nces.ed.gov/surveys/pss/tables/table_2004_06.asp

http://www.newsroom.gov.bc.ca/factsheets/downloads/64%20-%20Gulf%20Islands.pdf

http://www.summerlearning.org/?page=know_the_facts

http://www.theatlantic.com/past/politics/educatio/barr2f.htm

http://www.theatlantic.com/past/politics/educatio/barr2f.htmq

http://www.timeandlearning.org/time-student-achievement#

http://www.vancouversun.com/news/bill+usher+quick+changes+school+calendars+George+Abbott/6531221/story.html#ixzz21CyNBz2E

http://www.vancouversun.com/news/bill+usher+quick+changes+school+calendars+George+Abbott/6531221/story.html#ixzz25EWJVgvj

http://www.vancouversun.com/news/bill+usher+quick+changes+school+calendars+George+Abbott/6531221/story.html#ixzz21CyNBz2E

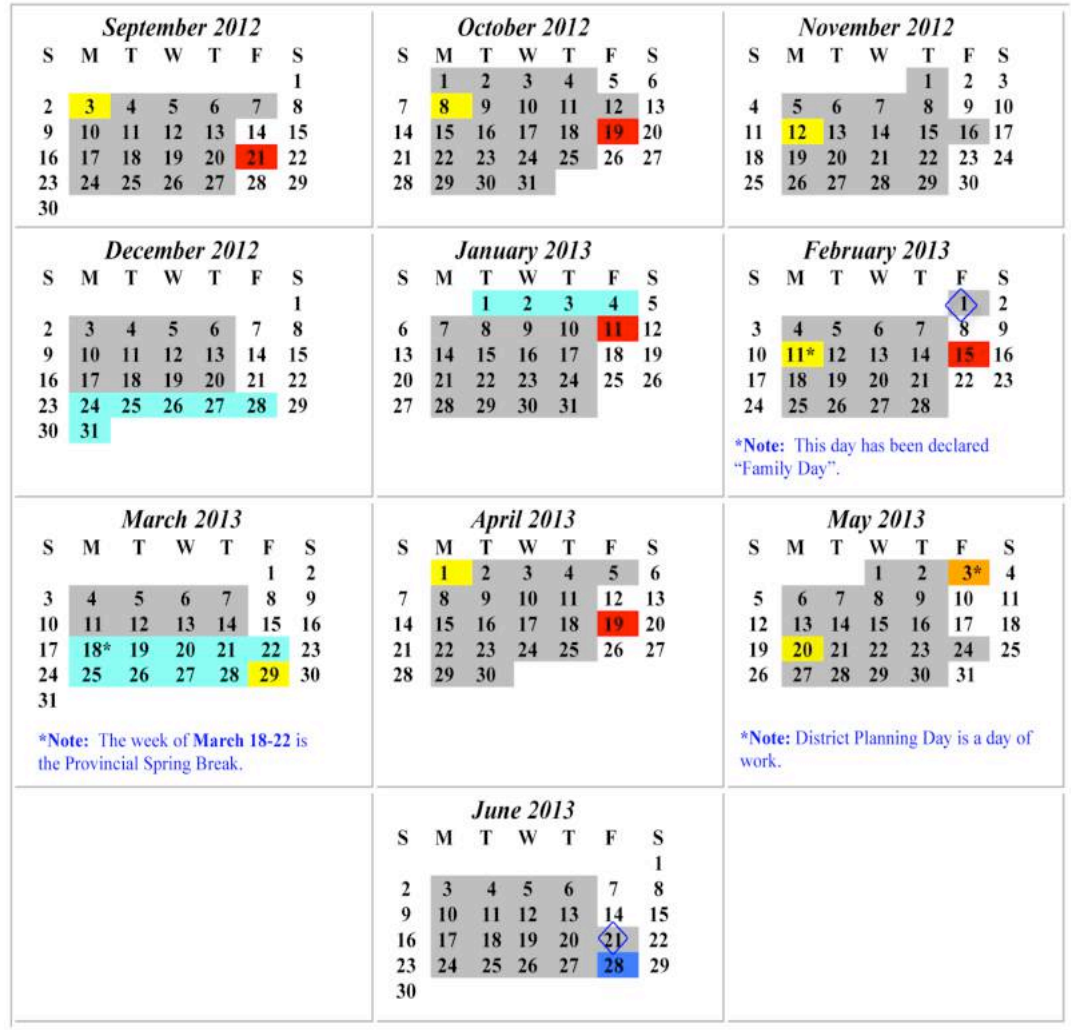
www.ncsl.org/issues-research/educ/school-calendar-four-day-school-week-overview.aspx

http://www.ncsba.org/clientuploads/DocumentsPDF/Advocacy/2011schoolyear.pdf

Appendix Six: The School District's Locally Modified Calendar for the 2012-2013 School Year

School District #64 (Gulf Islands)

2012/2013 4-Day Instructional Week Calendar



Require 157 days of instruction. Students are required to be in attendance.

Seven (7) stat days; includes February 11, 2013 – "Family Day"

Six (6) non-instructional days: 5 Pro D days, and

1 Planning Day – May 3 – this is a day of work

▸ September	21	School Based	▸ February	15	District Pro D Day
▸ October	19	Provincial Day	▸ April	19	School Based
▸ January	11	School Based	▸ May	03	District Planning Day

Winter and Spring Breaks

Administrative Day

◇ Indicates an instructional Friday added to meet Ministry minimum number of days of instruction and to avoid a split in Spring Break. These are exam days.

Revised: September 12, 2012

Appendix Seven: Lengths of the School Day in SD64 (from data provided on district website)

School	Day Starts	Recess AM	Lunch	Recess PM	Day Ends
Galiano K-12	9:00	10:30-10:45	12:05-12:30	2:10-2:25	3:36
Fernwood K-5	8:25	9:50-10:05	11:30-12:15	1:40-1:55	3:20
Fulford K-5	8:13	10:00-10:20	12:00-12:40	none	3:00
Mayne K-12	8:40	10:05-10:20	11:40-12:30	1:50-2:05	3:25
GISS 9-12	8:50		12:40-1:35		4:15
SS Elem. K-5	8:24	10:01-10:15	11:30-12:15	2:01-2:15	3:15
SIMS 6-8	8:30	10:25-10:35	12:20-1:15	none	3:24
Phoenix Elem. K-8	8:30	10:00-10:15	12:00-12:40	2:00-2:10	3:15
Windsor House K-12	9:15	TBD by teacher	TBD by teacher	TBD by teacher	3:30/3:50